



# STIC Search Report

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**TO:** Jennifer Kim  
**Location:** 4b02 / 4b18  
**Wednesday, December 15, 2004**  
**Art Unit:** 1617  
**Phone:** 272-0628  
**Serial Number:** 10 / 065326

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### Search Notes

-Jan Relevoat -

Access DB# 140501

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name Jennifer Kim Examiner # 79469 Date: 12/15/04  
Art Unit 1619 Phone Number 30628 Serial Number 10/065,326  
Mail Box and Bldg Room Location Rem 4B02 Results Format Preferred (circle):  PAPER  DISK  E-MAIL

If more than one search is submitted, please prioritize searches in order of need. M18J

Please provide a detailed statement of the search topic and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples of relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention Method of Using Omega-3 fatty acids  
Inventors (please provide full names): Eicker et al.

Earliest Priority Filing Date: 10/3/2002

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search claim 1-7.

THY,

JR

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L48 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 2004:293399 HCAPLUS  
DN 140:281406  
ED Entered STN: 09 Apr 2004  
TI Method of using omega-3 fatty acids  
IN Zicker, Steven Curtis; Dodd, Chadwick E.; Jewell, Dennis; Fritsch, Dale A.  
PA USA  
SO U.S. Pat. Appl. Publ., 3 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
IC ICM A61K031-202  
NCL 514560000  
CC 1-11 (Pharmacology)  
Section cross-reference(s): 18

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004068010	A1	20040408	US 2002-65326	20021003 <--
PRAI US 2002-65326		20021003 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004068010	ICM	A61K031-202
	NCL	514560000

AB A method for influencing behavior in young, adult or aged pet animals which comprises systemically administering a behavior influencing quantity of an omega-3 fatty acid or mixture of omega-3 fatty acids.  
ST pet animal behavior omega 3 fatty acid  
IT Behavior  
(disorder; method of using omega-3 fatty acids)  
IT Development, mammalian postnatal  
(juvenile; method of using omega-3 fatty acids)  
IT Aging, animal  
Behavior  
Canis familiaris

**Felis catus****Pet animal**

(method of using omega-3 fatty acids)

**IT Fatty acids, biological studies**RL: FFD (Food or feed use); PAC (Pharmacological activity); BIOL (Biological study); USES (Uses)  
(polyunsatd., n-3; method of using omega-3 fatty acids)

L48 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:817939 HCAPLUS

DN 139:291575

ED Entered STN: 17 Oct 2003

TI Dietary methods for canine performance enhancement

IN Davenport, Gary Mitchell; Kelley, Russell Lee; Altom, Eric Karl; Lepine, Allan John

PA USA

SO U.S. Pat. Appl. Publ., 10 pp.

CODEN: USXXCO

DT Patent

LA English

IC ICM A23L001-00

ICS A61K047-00

NCL 426601000; 426635000; 424442000

CC 18-4 (Animal Nutrition)

Section cross-reference(s): 17

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003194478	A1	20031016	US 2002-121325	20020412
	WO 2003086100	A1	20031023	WO 2003-US11509	20030414
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	US 2002-121325	A	20020412		

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

US 2003194478	ICM	A23L001-00
	ICS	A61K047-00
	NCL	426601000; 426635000; 424442000

AB A method for increasing the hunt performance of a hunting mammal (dog) which includes orally administering to the mammal an effective amount of a diet comprising unsatd. fatty acid(s) (eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA) or both) in a total amount of the diet greater than about 0.20 weight%. The invention also provides dietary compns. that yield other beneficial results.

ST unsatd fatty acid feed hunting dog energy metab; EPA  
DHA feed hunting dog energy metab

IT Feed  
(Eukanuba; dietary methods for canine performance enhancement)

IT **Canis familiaris**  
(bird dog; dietary methods for canine performance enhancement)

IT Fats and Glyceridic oils, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (chicken; dietary methods for canine performance enhancement)

IT Body temperature  
 Feed energy  
 Feeding experiment  
 Thermoregulation, biological  
 (dietary methods for canine performance enhancement)

IT Carbohydrates, biological studies  
 Fats and Glyceridic oils, biological studies  
 Proteins  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (dietary methods for canine performance enhancement)

IT Metabolism  
 (energy; dietary methods for canine performance enhancement)

IT Flours and Meals  
 (flaxseed; dietary methods for canine performance enhancement)

IT Flaxseed  
 (flour and meal; dietary methods for canine performance enhancement)

IT **Canis familiaris**  
 (hunting dog, English Pointer; dietary methods for  
 canine performance enhancement)

IT **Canis familiaris**  
 Exercise  
 (hunting dog; dietary methods for canine  
 performance enhancement)

IT Mammalia  
 (hunting mammal; dietary methods for canine performance enhancement)

IT Fish  
 (meal; dietary methods for canine performance enhancement)

IT **Fatty acids, biological studies**  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (polyunsatd., n-3; dietary methods for  
 canine performance enhancement)

IT Fatty acids, biological studies  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (polyunsatd., omega-6; dietary methods for canine performance  
 enhancement)

IT Fats and Glyceridic oils, biological studies  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (unsatd.; dietary methods for canine performance enhancement)

IT 6217-54-5, Docosahexaenoic acid 10417-94-4, Eicosapentaenoic acid  
 32839-34-2, Docosapentaenoic acid  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (dietary methods for canine performance enhancement)

L48 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2003:514957 HCAPLUS  
 DN 139:179279  
 ED Entered STN: 07 Jul 2003  
 TI Effects of dietary n-6 and n-3 fatty acids and vitamin E on the immune  
 response of healthy geriatric dogs  
 AU Hall, Jean A.; Tooley, Katie A.; Gradin, Joseph L.; Jewell, Dennis  
 E.; Wander, Rosemary C.  
 CS Department of Biomedical Sciences, College of Veterinary Medicine, Oregon  
 State University, Corvallis, OR, 97331-4802, USA  
 SO American Journal of Veterinary Research (2003), 64(6), 762-772  
 CODEN: AJVRAH; ISSN: 0002-9645  
 PB American Veterinary Medical Association  
 DT Journal  
 LA English  
 CC 18-5 (Animal Nutrition)  
 AB Objective-To determine the effect of dietary n-6 to n-3 fatty acid ratios and  
 $\alpha$ -tocopheryl acetate concentration on immune functions and T cell

subpopulations in healthy **dogs**. Animals - Thirty-two 7- to 10-yr old female Beagles. Procedure-For 17 wk, **dogs** were fed food that contained low (1.4:1) or high (40:1) ratios of n-6 to n-3 fatty acids in combination with 3 concns. of all rac- $\alpha$ -tocopheryl acetate (low, 17 mg/kg of food; medium, 101 mg/kg; high, 447 mg/kg). **Dogs** were inoculated twice with a keyhole limpet hemocyanin suspension at 13 and 15 wk. Results-After 12 wk, **dogs** consuming low concns. of  $\alpha$ -tocopheryl acetate had lower percentages of CD8+ T cells, compared with **dogs** consuming medium or high  $\alpha$ -tocopheryl acetate concns. Also, **dogs** consuming low  $\alpha$ -tocopheryl acetate concns. had higher CD4+ to CD8+ T cell ratios. On day 4 of week 15, the percentage of CD8+ T cells was highest in **dogs** fed medium concns. of  $\alpha$ -tocopheryl acetate, compared with other **dogs**; however, the CD4+ to CD8+ T cell ratio was higher only in **dogs** fed low concns. of  $\alpha$ -tocopheryl acetate with high concns. of n-3 fatty acids. **Dogs** consuming low concns. of n-3 fatty acids with medium concns. of  $\alpha$ -tocopheryl acetate had the largest delayed-type hypersensitivity (DTH) skin test response. Conclusions and Clin. Relevance-An optimum amount of dietary  $\alpha$ -tocopheryl acetate concentration, regardless of the dietary n-6 to n-3 fatty acid ratio, stimulates the CD8+ T cell population. Effects of an optimum amount of dietary  $\alpha$ -tocopheryl acetate concentration on the DTH response are blunted by dietary n-3 fatty acids.

ST **dog** aging n3 n6 fatty acid nutrition immune response; vitamin E nutrition immune response aging **dog**

IT **Canis familiaris**

(beagle; effects of dietary n-3 and n-6 fatty acids and vitamin E on the immune response of healthy geriatric **dogs**)

IT **Fatty acids, biological studies**

Lipids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(blood; effects of dietary n-3 and n-6 fatty acids and vitamin E on the immune response of healthy geriatric **dogs**)

IT **Immunity**

(cell-mediated; effects of dietary n-3 and n-6 fatty acids and vitamin E on the immune response of healthy geriatric **dogs**)

IT **Aging, animal**

CD4-positive T cell

CD8-positive T cell

Erythrocyte

Hematocrit

Lymphocyte

Nutrition, animal

(effects of dietary n-3 and n-6 fatty acids and vitamin E on the immune response of healthy geriatric **dogs**)

IT **Hemoglobins**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(effects of dietary n-3 and n-6 fatty acids and vitamin E on the immune response of healthy geriatric **dogs**)

IT **Fatty acids, biological studies**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(polyunsatd., n-3; effects of dietary n-3 and n-6 fatty acids and vitamin E on the immune response of healthy geriatric **dogs**)

IT **Fatty acids, biological studies**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(polyunsatd., omega-6; effects of dietary n-3 and n-6 fatty acids and vitamin E on the immune response of healthy geriatric **dogs**)

IT 59-02-9,  $\alpha$ -Tocopherol 60-33-3, 9,12-Octadecadienoic acid

(9Z,12Z)-, biological studies 112-80-1, 9-Octadecenoic acid (9Z)-, biological studies 506-32-1 6217-54-5 10417-94-4

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (effects of dietary n-3 and n-6 fatty acids and vitamin E on the immune  
 response of healthy geriatric dogs)

RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD

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L48 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:74176 HCAPLUS

DN 136:278675

ED Entered STN: 28 Jan 2002

TI Influence of dietary long-chain n-3 fatty acids from Menhaden fish oil on  
 plasma concentrations of  $\alpha$ -tocopherol in geriatric Beagles

AU Hall, Jean A.; Tooley, Katie A.; Gradin, Joseph L.; Jewell, Dennis

**E.**; Wander, Rosemary C.  
 CS Department of Biomedical Sciences, College of Veterinary Medicine, Oregon State University, Corvallis, OR, 97331-4802, USA  
 SO American Journal of Veterinary Research (2002), 63(1), 104-110  
 CODEN: AJVRAH; ISSN: 0002-9645  
 PB American Veterinary Medical Association  
 DT Journal  
 LA English  
 CC 18-5 (Animal Nutrition)  
 AB To determine effects of dietary n-3 fatty acids from Menhaden fish oil on plasma  $\alpha$ -tocopherol concns. in Beagles. 32 Female Beagles. For 82 days, **dogs** were fed diets that contained 1 of 2 ratios of n-6:n-3 fatty acids (40:1 [low n-3] and 1.4:1 [high n-3]) and 1 of 3 concns. of all-rac- $\alpha$ -tocopheryl acetate (low, 17 mg/kg of diet; medium, 101 mg/kg; and high, 447 mg/kg) in a 2 x 3 factorial study. Diets high in n-3 fatty acids significantly increased total content of n-3 fatty acids in plasma (17.0 g/100 g of fatty acids), compared with low n-3 diets (2.02 g/100 g of fatty acids). Mean  $\pm$  SEM plasma concentration of cholesterol was significantly lower in **dogs** consuming high n-3 diets (4.59  $\pm$  0.48 mmol/L), compared with **dogs** consuming low n-3 diets (5.71  $\pm$  0.48 mmol/L). A significant interaction existed between the ratio for n-6 and n-3 fatty acids and amount of  $\alpha$ -tocopheryl acetate in the diet (plasma  $\alpha$ -tocopherol concentration expressed on a molar basis), because the plasma concentration of  $\alpha$ -tocopherol was higher in **dogs** consuming low n-3 diets, compared with those consuming high n-3 diets, at the 2 higher amts. of dietary  $\alpha$ -tocopheryl acetate. Plasma  $\alpha$ -tocopherol concentration expressed relative to total lipid content did not reveal effects of dietary n-3 fatty acids on concentration of  $\alpha$ -tocopherol. Plasma  $\alpha$ -tocopherol concentration is not dependent on dietary ratio of n-6 and n-3 fatty acids when  $\alpha$ -tocopherol concentration is expressed relative to the total lipid content of plasma.  
 ST elderly **dog** nutrition n3 fatty acid tocopherol blood lipid  
 IT Glycerides, biological studies  
 Lipids, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (blood; influence of dietary long-chain n-3 fatty acids from Menhaden fish oil on plasma concns. of  $\alpha$ -tocopherol in geriatric Beagles)  
 IT Aging, animal  
 (elderly; influence of dietary long-chain n-3 fatty acids from Menhaden fish oil on plasma concns. of  $\alpha$ -tocopherol in geriatric Beagles)  
 IT Fats and Glyceridic oils; biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (fish; influence of dietary long-chain n-3 fatty acids from Menhaden fish oil on plasma concns. of  $\alpha$ -tocopherol in geriatric Beagles)  
 IT **Canis familiaris**  
 Diet  
 Nutrition, animal  
 (influence of dietary long-chain n-3 fatty acids from Menhaden fish oil on plasma concns. of  $\alpha$ -tocopherol in geriatric Beagles)  
 IT Peroxides, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (lipid; influence of dietary long-chain n-3 fatty acids from Menhaden fish oil on plasma concns. of  $\alpha$ -tocopherol in geriatric Beagles)  
 IT Lipids, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (peroxides; influence of dietary long-chain n-3 fatty acids from Menhaden fish oil on plasma concns. of  $\alpha$ -tocopherol in geriatric Beagles)  
 IT **Fatty acids, biological studies**  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (polyunsatd., n-3; influence of dietary long-chain n-3 fatty acids from Menhaden fish oil on plasma concns. of  $\alpha$ -tocopherol in geriatric Beagles)

## IT Fatty acids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(polyunsatd., omega-6; influence of dietary long-chain n-3 fatty acids from Menhaden fish oil on plasma concns. of  $\alpha$ -tocopherol in geriatric Beagles)

IT 57-88-5, Cholesterol, biological studies 58-95-7,  $\alpha$ -Tocopheryl acetate 59-02-9,  $\alpha$ -Tocopherol 60-33-3, 9,12-Octadecadienoic acid (9Z,12Z)-, biological studies 112-80-1, 9-Octadecenoic acid (9Z)-, biological studies 506-32-1 10417-94-4

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(influence of dietary long-chain n-3 fatty acids from Menhaden fish oil on plasma concns. of  $\alpha$ -tocopherol in geriatric Beagles)

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD

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L48 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:152970 HCAPLUS

DN 133:42655

ED Entered STN: 08 Mar 2000

TI N-3 fatty acids and behavior

AU Hamazaki, Tomohito

CS Inst. Natural Med., Toyama Med. Pharmaceutical Univ., Toyama, 930-0194, Japan

SO Nippon Shokuhin Shinsozai Kenkyukaishi (1999), 2(2), 75-81

CODEN: NSSKFM

PB Shokuhin Shinsozai Kyogikai

DT Journal; General Review

LA Japanese

CC 18-0 (Animal Nutrition)

Section cross-reference(s): 13, 14

AB A review with 39 refs. The full-dress investigation of n-3 fatty acids started from the finding that the very low incidence in heart attack in Greenlanders are due to their huge intakes of n-3 fatty acids. The major n-3 fatty acids are  $\alpha$ -linolenic acid, eicosapentanoic acid (EPA) and docosahexaenoic acid (DHA). Fish oils contain a sizable amount of EPA and DHA. N-3 fatty acids prevent heart attack and other important diseases mainly through inhibition of eicosanoid (a kind of local hormone) production from arachidonic acid. Furthermore, research of the effects of DHA on learning ability and **behavior** has become popular these years. The fact that DHA is one of the major polyunsatd. fatty acids in the brain is associated to this trend. The authors recently found that DHA administration to volunteers prevented enhancement of aggressiveness and hostility at times of mental stress in a double-blind study. The incidence of heart attack and other diseases including cancer is higher in hostile people. Consequently, this effect of DHA on hostility may be regarded as one of the mechanisms of action in terms of disease prevention. Very recently new effects of n-3 fatty acids on psychol. disorders have been reported. In double-blind studies, EPA was effective in lowering pos. symptoms in schizophrenics; EPA plus DHA are effective in elongating symptom-free period in bipolar disorder. The area of n-3 fatty acids and **behavior**/psychol. disorders will be a hot topic in near future.

ST review n3 fatty acid **behavior** mental

IT **Behavior**  
Mental disorder  
(effects of N-3 fatty acids on **behavior** and psychol. disorders)

IT **Fatty acids, biological studies**  
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(**polyunsatd.**, **omega-3**; effects of N-3 fatty acids on **behavior** and psychol. disorders)

L48 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 2000:117352 HCAPLUS  
DN 132:121845  
ED Entered STN: 18 Feb 2000  
TI DHA controls aggression  
AU Hamazaki, Tomohito  
CS Inst. Nat. Med., Toyama Med. Pharm. Univ., Japan  
SO Kagaku to Seibutsu (2000), 38(2), 72-74  
CODEN: KASEAA; ISSN: 0453-073X  
PB Gakkai Shuppan Senta  
DT Journal; General Review  
LA Japanese  
CC 18-0 (**Animal Nutrition**)  
AB A review with 6 refs., on the suppression of aggression by dietary docosahexaenoic acid (DHA). The possible involvement of n-3 fatty acids in the control of **behavioral** and mental status, and their effectiveness in the prevention of diseases (cardiac infarction, etc.) are discussed.

ST review diet docosahexaenoate aggression  
IT **Behavior**  
(**aggressive**; suppression of aggression by dietary docosahexaenoic acid)

IT **Fatty acids, biological studies**  
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(**polyunsatd.**, **omega-3**; suppression of

aggression by dietary docosahexaenoic acid)

IT 6217-54-5, Docosahexaenoic acid  
 RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process) (suppression of aggression by dietary docosahexaenoic acid)

L48 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2000:47020 HCAPLUS  
 DN 132:61088  
 ED Entered STN: 20 Jan 2000  
 TI Method for reducing the damaging effects of radiation therapy on animal skin and mucosa  
 IN Ogilvie, Gregory K.; Davenport, Deborah J.; Gross, Kathy L.; Hand, Michael S.  
 PA Colgate Palmolive Co., USA; Colorado State University Research Foundation  
 SO U.S., 6 pp., Cont.-in-part of U. S. 5,776,913.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM A61K031-715  
 ICS A61K031-685; A61K031-20; A61K031-195  
 NCL 514057000  
 CC 8-9 (Radiation Biochemistry)  
 Section cross-reference(s): 17, 18  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6015798	A	200000118	US 1998-106295	19980629
	US 5776913	A	19980707	US 1995-544421	19951010
	CA 2234249	AA	19970417	CA 1996-2234249	19961004
	CA 2234249	C	20020326		
	ES 2170269	T3	20020801	ES 1996-934026	19961004
	ZA 9608482	A	19980408	ZA 1996-8482	19961008
	CA 2336628	AA	200000106	CA 1999-2336628	19990624
	WO 2000000189	A1	200000106	WO 1999-US14344	19990624
		W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
		RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
	AU 9947167	A1	200000117	AU 1999-47167	19990624
	AU 761266	B2	20030529		
	EP 1091734	A1	20010418	EP 1999-930683	19990624
	EP 1091734	B1	20030917		
		R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI, RO		
	TR 200100457	T2	20010821	TR 2001-200100457	19990624
	JP 2002519320	T2	20020702	JP 2000-556774	19990624
	NZ 508766	A	20030530	NZ 1999-508766	19990624
	AT 249821	E	20031015	AT 1999-930683	19990624
	ES 2207951	T3	20040601	ES 1999-930683	19990624
	ZA 2000007650	A	20020619	ZA 2000-7650	20001219
	NO 2000006575	A	20010228	NO 2000-6575	20001221
PRAI	US 1995-544421	A2	19951010		
	US 1998-106295	A	19980629		
	WO 1999-US14344	W	19990624		

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

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 US 6015798 ICM A61K031-715  
 ICS A61K031-685; A61K031-20; A61K031-195  
 NCL 514057000  
 US 6015798 ECLA A23K001/16G1; A23K001/16I; A23K001/18N; A23K001/18N6  
 US 5776913 ECLA A23K001/16G1; A23K001/16I; A23K001/18N; A23K001/18N6  
 WO 2000000189 ECLA A23K001/18N

AB The severity of damage caused to the skin and mucosa of animals with cancer undergoing radiation therapy is mitigated by feeding the animal a nutritionally balanced food composition containing omega-6 polyunsatd. fatty acids

which are supplemented with a mixture of a omega-3 polyunsatd. fatty acids and arginine. Dogs with malignant neoplasia of the nasal cavity were treated with radiation and maintained on a diet containing either menhaden fish oil + arginine or soybean oil. Dogs on the fish oil diet had significantly higher serum levels of docosahexaenoic acid and eicosapentaenoic acid, reduced concns. of linoleic acid, and lower levels of oral mucosal and skin inflammatory mediators (prostaglandin E2 and 11-dehydrothromboxane B2) than dogs maintained on the control diet. Dogs maintained on the fish oil diet also showed decreased mucositis.

ST radiotherapy skin mucosa damage fatty acid; radioprotectant skin mucosa arginine fatty acid

IT Fats and Glyceridic oils, biological studies

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(fish; method for reducing damaging effects of radiotherapy on animal skin and mucosa)

IT Mucous membrane

(inflammation; method for reducing damaging effects of radiotherapy on animal skin and mucosa)

IT Fats and Glyceridic oils, biological studies

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(menhaden; method for reducing damaging effects of radiotherapy on animal skin and mucosa)

IT Cat (*Felis catus*)

Dog (*Canis familiaris*)

Feed

Inflammation

Mucous membrane

Pet animal

Radioprotectants

Radiotherapy

Skin

(method for reducing damaging effects of radiotherapy on animal skin and mucosa)

IT Fatty acids, biological studies

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyunsatd., omega-3; method for reducing damaging effects of radiotherapy on animal skin and mucosa)

IT Fatty acids, biological studies

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyunsatd., omega-6; method for reducing damaging effects of radiotherapy on animal skin and mucosa)

IT 60-33-3, Linoleic acid, biological studies 363-24-6, Prostaglandin E2

6217-54-5, Docosahexaenoic acid 10417-94-4, Eicosapentaenoic acid

67910-12-7, 11-Dehydrothromboxane B2

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(method for reducing damaging effects of radiotherapy on animal skin

and mucosa)

IT 74-79-3, L-Arginine, biological studies 7200-25-1, Arginine  
 RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological  
 study); USES (Uses)  
 (method for reducing damaging effects of radiotherapy on animal skin  
 and mucosa)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Ogilvie; US 5776913 1998 HCAPLUS

L48 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2000:14997 HCAPLUS  
 DN 132:47018  
 ED Entered STN: 07 Jan 2000  
 TI Method for reducing the damaging effects of radiation therapy on animal  
 skin and mucosa  
 IN Davenport, Deborah J.; Gross, Kathy L.; Ogilvie, Gregory K.; Hand, Michael  
 S.  
 PA Colgate-Palmolive Company, USA; Colorado State University  
 Research Foundation  
 SO PCT Int. Appl., 21 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K031-195  
 ICS A61K031-20; A61K031-23; A23K001-18  
 CC 8-9 (Radiation Biochemistry)  
 Section cross-reference(s): 17

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000000189	A1	20000106	WO 1999-US14344	19990624
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6015798	A	20000118	US 1998-106295	19980629
	CA 2336628	AA	20000106	CA 1999-2336628	19990624
	AU 9947167	A1	20000117	AU 1999-47167	19990624
	AU 761266	B2	20030529		
	EP 1091734	A1	20010418	EP 1999-930683	19990624
	EP 1091734	B1	20030917		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI, RO				
	JP 2002519320	T2	20020702	JP 2000-556774	19990624
	NZ 508766	A	20030530	NZ 1999-508766	19990624
	AT 249821	E	20031015	AT 1999-930683	19990624
	NO 2000006575	A	20010228	NO 2000-6575	20001221
PRAI	US 1998-106295	A	19980629		
	US 1995-544421	A2	19951010		
	WO 1999-US14344	W	19990624		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000000189	ICM	A61K031-195
	ICS	A61K031-20; A61K031-23; A23K001-18
WO 2000000189	ECLA	A23K001/18N
US 6015798	ECLA	A23K001/16G1; A23K001/16I; A23K001/18N; A23K001/18N6
AB	The severity of damage caused to the skin and mucosa of animals with	

cancer undergoing radiation therapy is mitigated by feeding the animal a nutritionally balanced food composition containing omega-6 polyunsatd. fatty acids

which are supplemented with a mixture of an omega-3 polyunsatd. fatty acid and arginine. The nutritionally balanced food has a fat content of about 27-35% dry weight, carbohydrate content of about 15-27% dry weight, and a weight

ratio of omega-3 to omega-6 polyunsatd. fatty acids in the range of 0.3:1 to 3.5:1.

ST pet animal radiotherapy skin mucosa protection; fatty acid arginine radioprotectant feed animal

IT Fats and Glyceridic oils, biological studies

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(fish; method for reducing damaging effects of radiation therapy on animal skin and mucosa)

IT Fats and Glyceridic oils, biological studies

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(menhaden; method for reducing damaging effects of radiation therapy on animal skin and mucosa)

IT Cat (*Felis catus*)

Dog (*Canis familiaris*)

Feed

Mucous membrane

Pet animal

Radioprotectants

Radiotherapy

Skin

(method for reducing damaging effects of radiation therapy on animal skin and mucosa)

IT Carbohydrates, biological studies

Fats and Glyceridic oils, biological studies

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method for reducing damaging effects of radiation therapy on animal skin and mucosa)

IT Fatty acids, biological studies

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyunsatd., omega-3; method for reducing damaging effects of radiation therapy on animal skin and mucosa)

IT Fatty acids, biological studies

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyunsatd., omega-6; method for reducing damaging effects of radiation therapy on animal skin and mucosa)

IT 74-79-3, Arginine, biological studies 7200-25-1, Arginine

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method for reducing damaging effects of radiation therapy on animal skin and mucosa)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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L48 ANSWER 9 OF 15 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 1999:222178 HCPLUS  
 DN 131:44176  
 ED Entered STN: 09 Apr 1999  
 TI Effect of dietary n-6-to-n-3 fatty acid ratio on complete blood and total white blood cell counts, and T-cell subpopulations in aged **dogs**  
 AU Hall, Jean A.; Wander, Rosemary C.; Gradin, Joseph L.; Du, Shi-Hua; Jewell, Dennis E.  
 CS College of Veterinary Medicine, Oregon State University, Corvallis, OR, 97331, USA  
 SO American Journal of Veterinary Research (1999), 60(3), 319-327  
 CODEN: AJVRAH; ISSN: 0002-9645  
 PB American Veterinary Medical Association  
 DT Journal  
 LA English  
 CC 18-5 (Animal Nutrition)  
 AB The effects of diets with variable n-6/n-3 fatty acid (FA) ratio on CD4+ and CD8+ T-lymphocyte subpopulations and on routine hematol. anal. results (blood cell and leukocyte counts, serum biochem., urinalysis) were studied for 11 wk in 20 healthy, aged (9.5-11.5 yr) female Beagle **dogs**. The **dogs** were fed 1 of 3 diets that contained 6% fat but differed in the n-6/n-3 FA ratio. Six **dogs** were fed a low n-3 FA diet (ratio 31:1), 7 **dogs** were fed a medium n-3 diet (5.4:1), and 7 **dogs** were fed a high n-3 diet (1.4:1). Preprandial blood and urine samples were collected before the study and at 8 wk for the evaluation of laboratory variables. Before and at 3, 6, and 8 wk of the study, blood was drawn for total leukocyte and lymphocyte counts and for characterization of T-cell subpopulations. At 8 and 10 wk the **dogs** were vaccinated with keyhole limpet hemocyanin suspension. Blood was drawn 4 days after each vaccination and lymphocytes were isolated for flow cytometry. The effects of diet and vaccination on each variable were determined. After vaccination the total lymphocyte counts increased and CD4+ T-lymphocyte counts and the CD4+/CD8+ ratio decreased in **dogs** fed the diet with n-6/n-3 FA ratio of 1.4:1. Thus, diet with n-6/n-3 FA ratio of 1.4:1 affected the CD4+ T-lymphocyte counts in healthy aged Beagle **dogs** after vaccination.  
 ST **dog** aging nutrition fatty acid blood lymphocyte index  
 IT Aging, animal  
 Blood  
     **Dog (Canis familiaris)**  
     Feeding experiment  
     Leukocyte  
     Nutrition, animal  
     T cell (lymphocyte)  
     (dietary fatty acid n-6/n-3 ratio effects on blood biochem. indexes and leukocyte counts in aged **dogs**)  
 IT **Fatty acids, biological studies**  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
     (polyunsatd., omega-3; dietary fatty acid  
     n-6/n-3 ratio effects on blood biochem. indexes and leukocyte counts in aged **dogs**)  
 IT **Fatty acids, biological studies**  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
     (polyunsatd., omega-6; dietary fatty acid n-6/n-3  
     ratio effects on blood biochem. indexes and leukocyte counts in aged **dogs**)  
 RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD  
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 (2) Calder, P; Ann Nutr Metab 1997, V41, P203 HCPLUS  
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 HCPLUS  
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 (41) Yaqoob, P; Nutr Res 1995, V15, P279 HCPLUS

L48 ANSWER 10 OF 15 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 1997:357440 HCPLUS  
 DN 127:94648  
 ED Entered STN: 07 Jun 1997  
 TI The ratio of dietary (n-6) to (n-3) fatty acids influences immune system  
 function, eicosanoid metabolism, lipid peroxidation and vitamin E status  
 in aged **dogs**  
 AU Wander, Rosemary C.; Hall, Jean A.; Gradin, Joseph L.; Su, Shi-Hua;  
**Jewell, Dennis E.**  
 CS Dep. Nutrition Food Management, Oregon State Univ., Corvallis, OR,  
 97331-4802, USA  
 SO Journal of Nutrition (1997), 127(6), 1198-1205  
 CODEN: JONUAI; ISSN: 0022-3166  
 PB American Society for Nutritional Sciences  
 DT Journal  
 LA English  
 CC 18-5 (Animal Nutrition)  
 Section cross-reference(s): 13, 15  
 AB We studied the effects of feeding exptl. diets containing (n-6) to (n-3) fatty  
 acid ratios of 31:1, 5.4:1, and 1.4:1 to 20 healthy old female Beagle  
**dogs** (9.5-11.5 yr) for 8-12 wk on various indexes of the immune  
 response. Compared with the 31:1 diet, consumption of the 5.4:1 and 1.4:1  
 diets significantly increased the (n-3) fatty acids in plasma (2.17 ±

0.64, 9.05 ± 0.64, 17.46 ± 0.64 g/100 g fatty acids, resp.,  $P < 0.0001$ ). Although supplementation with (n-3) fatty acids did not significantly alter the humoral immune response to keyhole limpet hemocyanin (KLH), it significantly suppressed the cell-mediated immune response based on results of a delayed-type hypersensitivity (DTH) skin test. The DTH response after intradermal injection of KLH at 24 h was significantly lower in the group consuming the 1.4:1 diet compared with the group consuming the 5.4:1 ( $P = 0.02$ ) or the 31:1 diets ( $P = 0.04$ ), and remained significantly suppressed at 48 h in the group fed 1.4:1 relative to the group fed 31:1 diets. After consumption of the 1.4:1 diet, stimulated mononuclear cells produced 52% less prostaglandin E2 (PGE2) than cells from **dogs** fed the 31:1 diet ( $224 \pm 74$  and  $451 \pm 74$  pmol/L, resp.,  $P = 0.04$ ). Blood plasma concentration of  $\alpha$ -tocopherol was 20% lower in **dogs** fed the 1.4:1 diet compared with **dogs** fed the 31:1 diet ( $P = 0.04$ ), and lipid peroxidn. parameters were greater in both plasma ( $P = 0.03$ ) and urine ( $P = 0.002$ ). These data suggest that although a ratio of dietary (n-6) to (n-3) fatty acids of 1.4:1 depresses the cell-mediated immune response in PGE2 production, it increases lipid peroxidn. and lowers vitamin E concns.

ST feed fatty acid immunity prostaglandin tocopherol

IT Immunity

(cell-mediated; dietary (n-6) to (n-3) fatty acids influences on immunity, eicosanoid metabolism, lipid peroxidn. and vitamin E status in aged **dogs**)

IT Aging, animal

Blood plasma

Diet

Mononuclear cell (leukocyte)

Nutrition, animal

Urine

(dietary (n-6) to (n-3) fatty acids influences on immunity, eicosanoid metabolism, lipid peroxidn. and vitamin E status in aged **dogs**)

IT Glycerides, biological studies

RL: BOC (Biological occurrence); BSU (Biological study, unclassified);

BIOL (Biological study); OCCU (Occurrence)

(dietary (n-6) to (n-3) fatty acids influences on immunity, eicosanoid metabolism, lipid peroxidn. and vitamin E status in aged **dogs**)

IT Immunity

(humoral; dietary (n-6) to (n-3) fatty acids influences on immunity, eicosanoid metabolism, lipid peroxidn. and vitamin E status in aged **dogs**)

IT Peroxidation

(lipid; dietary (n-6) to (n-3) fatty acids influences on immunity, eicosanoid metabolism, lipid peroxidn. and vitamin E status in aged **dogs**)

IT Lipids, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)

(peroxidn.; dietary (n-6) to (n-3) fatty acids influences on immunity, eicosanoid metabolism, lipid peroxidn. and vitamin E status in aged **dogs**)

IT Fatty acids, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(polyunsatd., n-3; dietary (n-6) to (n-3) fatty acids influences on immunity, eicosanoid metabolism, lipid peroxidn. and vitamin E status in aged **dogs**)

IT Fatty acids, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(polyunsatd., omega-6; dietary (n-6) to (n-3) fatty acids influences on immunity, eicosanoid metabolism, lipid peroxidn. and vitamin E status in aged **dogs**)

IT 59-02-9,  $\alpha$ -Tocopherol  
 RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)  
 (dietary (n-6) to (n-3) fatty acids influences on immunity, eicosanoid metabolism, lipid peroxidn. and vitamin E status in aged dogs)

IT 57-88-5, Cholesterol, biological studies  
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)  
 (dietary (n-6) to (n-3) fatty acids influences on immunity, eicosanoid metabolism, lipid peroxidn. and vitamin E status in aged dogs)

IT 363-24-6, Pge2  
 RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)  
 (dietary (n-6) to (n-3) fatty acids influences on immunity, eicosanoid metabolism, lipid peroxidn. and vitamin E status in aged dogs)

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD

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L48 ANSWER 11 OF 15 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 1997:351127 HCPLUS  
 DN 126:316847  
 ED Entered STN: 05 Jun 1997

TI Therapeutic diet for **dogs** with lymphoma  
 IN Ogilvie, Gregory K.; Davenport, Deborah J.; Gross, Kathy L.; Hand, Michael S.  
 PA **Colgate-Palmolive Company, USA**; Ogilvie, Gregory K.  
 SO PCT Int. Appl., 25 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A23K001-16  
 ICS A23K001-18; A61K031-195; A61K031-20; A61K031-23  
 CC 17-12 (Food and Feed Chemistry)  
 Section cross-reference(s): 14, 18

PAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9713415	A1	19970417	WO 1996-US15865	19961004
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI				
	US 5776913	A	19980707	US 1995-544421	19951010
	CA 2234249	AA	19970417	CA 1996-2234249	19961004
	CA 2234249	C	20020326		
	AU 9672545	A1	19970430	AU 1996-72545	19961004
	AU 707341	B2	19990708		
	EP 854681	A1	19980729	EP 1996-934026	19961004
	EP 854681	B1	20011219		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
	JP 11513561	T2	19991124	JP 1996-515099	19961004
	BR 9611044	A	19991228	BR 1996-11044	19961004
	AT 210928	E	20020115	AT 1996-934026	19961004
	ES 2170269	T3	20020801	ES 1996-934026	19961004
	ZA 9608482	A	19980408	ZA 1996-8482	19961008
	NO 9801593	A	19980609	NO 1998-1593	19980407
PRAI	US 1995-544421	A	19951010		
	WO 1996-US15865	W	19961004		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 9713415	ICM	A23K001-16
		ICS	A23K001-18; A61K031-195; A61K031-20; A61K031-23
	WO 9713415	ECLA	A23K001/16G1; A23K001/16I; A23K001/18N; A23K001/18N6
	US 5776913	ECLA	A23K001/16G1; A23K001/16I; A23K001/18N; A23K001/18N6

AB The severity of metabolic disturbance in animals with cancer is mitigated by feeding the animal a nutritionally balanced food composition having a fat content of about 27 to 35%, on a dry matter basis, a carbohydrate content of about 15 to about 27% on a dry matter basis in which is present a mixture of arginine, omega-3 polyunsatd. fatty acids and omega-6 polyunsatd. fatty acids, the weight ratio of omega-3, omega-6 fatty acid being in the range of 0.3:1 to 3.5:1.

ST dog feed therapeutic diet lymphoma cancer

IT Lung

Meat

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(beef; therapeutic diet for **dogs** with lymphoma)

IT Meat

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chicken; therapeutic diet for **dogs** with lymphoma)

IT Proteins, general, biological studies  
 RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (dietary; therapeutic diet for **dogs** with lymphoma)

IT Fats and Glyceridic oils, biological studies  
 RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (menhaden; therapeutic diet for **dogs** with lymphoma)

IT **Fatty acids, biological studies**  
 RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (polyunsatd., n-3; therapeutic diet for  
**dogs** with lymphoma)

IT Fatty acids, biological studies  
 RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (polyunsatd., omega-6; therapeutic diet for **dogs** with  
 lymphoma)

IT Meat  
 RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (pork, liver; therapeutic diet for **dogs** with lymphoma)

IT Dietary fiber  
**Dog (Canis familiaris)**  
 Feed  
 Lymphoma  
 Neoplasm  
 Nutrition, animal  
 (therapeutic diet for **dogs** with lymphoma)

IT Carbohydrates, biological studies  
 Fats and Glyceridic oils, biological studies  
 Mineral elements, biological studies  
 Rice (*Oryza sativa*)  
 Vitamins  
 RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (therapeutic diet for **dogs** with lymphoma)

IT Diet  
 (therapeutic; therapeutic diet for **dogs** with lymphoma)

IT 56-87-1, L-Lysine, biological studies 57-10-3, Hexadecanoic acid, biological studies 57-11-4, Octadecanoic acid, biological studies 58-85-5, Biotin 59-30-3, Folic acid, biological studies 59-43-8, Vitamin B1, biological studies 59-67-6, Niacin, biological studies 60-18-4, L-Tyrosine, biological studies 60-33-3, 9,12-Octadecadienoic acid (Z,Z)-, biological studies 61-90-5, L-Leucine, biological studies 62-49-7, Choline 63-68-3, L-Methionine, biological studies 67-48-1, Choline chloride 68-19-9, Vitamin B12 71-00-1, L-Histidine, biological studies 72-19-5, L-Threonine, biological studies 73-22-3, Tryptophan, biological studies 73-32-5, L-Isoleucine, biological studies 74-79-3, Arginine, biological studies 79-83-4, Pantothenic acid 83-88-5, Vitamin B2, biological studies 107-35-7, Taurine 112-80-1, Oleic acid, biological studies 373-49-9, Palmitoleic acid 463-40-1, Linolenic acid 471-34-1, Calcium carbonate, biological studies 506-32-1, Arachidonic acid 866-84-2, Potassium citrate 1309-37-1, Red iron oxide, biological studies 1406-18-4, Vitamin E 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7440-09-7, Potassium, biological studies 7440-23-5, Sodium, biological studies 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies 7440-70-2, Calcium, biological studies 7553-56-2, Iodine, biological studies 7723-14-0, Phosphorus, biological studies 7782-49-2, Selenium, biological studies 8059-24-3, Vitamin B6 9004-34-6, Cellulose, biological studies 11103-57-4, Vitamin A 16887-00-6, Chloride, biological studies 28933-89-3

32839-18-2 32839-30-8 32839-34-2 81275-46-9  
 RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (therapeutic diet for **dogs** with lymphoma)

L48 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1997:229241 HCAPLUS  
 DN 126:263467  
 ED Entered STN: 09 Apr 1997  
 TI Omega-3 fatty acid deficiency and **behavior**: a critical review and directions for future research  
 AU Reisbick, Sydney; Neuringer, Martha  
 CS Oregon Regional Primate Research Center, Beaverton, OR, USA  
 SO Handbook of Essential Fatty Acid Biology (1997), 397-426. Editor(s): Yehuda, Shlomo; Mostofsky, David I. Publisher: Humana, Totowa, N. J.  
 CODEN: 64ESA8  
 DT Conference; General Review  
 LA English  
 CC 18-0 (**Animal Nutrition**)  
 AB A review with >140 refs. on the role of n3 fatty acid nutrition on development and **behavior**.  
 ST review n3 fatty acid development **behavior**  
 IT **Behavior**  
 Development, mammalian postnatal  
 (omega-3 fatty acid deficiency and **behavior**)  
 IT **Fatty acids, biological studies**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
 (polyunsatd., n-3; omega-3 fatty acid deficiency and **behavior**)

L48 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1994:243195 HCAPLUS  
 DN 120:243195  
 ED Entered STN: 14 May 1994  
 TI Home cage **behavior** of rhesus **monkeys** with long-term deficiency of omega-3 fatty acids  
 AU Reisbick, S.; Neuringer, M.; Hasnain, R.; Connor, W. E.  
 CS Dep. Med., Oregon Health Sci. Univ., Portland, OR, 97201, USA  
 SO Physiology & Behavior (1994), 55(2), 231-9  
 CODEN: PHBHA4; ISSN: 0031-9384  
 DT Journal  
 LA English  
 CC 18-5 (**Animal Nutrition**)  
 AB In an observational study with a blind observer, rhesus **monkeys** deficient in omega-3 ( $\omega$ -3 or n-3) fatty acids initiated more bouts of stereotyped **behavior** in their home cages than **monkeys** fed a matched control diet abundant in omega-3 fatty acids. Locomotion bouts were also more frequent in deficient **monkeys**, but nonstereotyped locomotion did not differ. Both stereotyped **behavior** and the sum of all **behavioral** bouts were more frequent in 4-5-yr-old than in 2-3-old **monkeys**, and stereotyped decreased after meals in males but not in females. The stereotyped **behaviors** associated with a deficit in omega-3 fatty acids were those typical of rhesus **monkeys** raised as partial social isolates or those whose surroundings have been disrupted.  
 ST n3 fatty acid diet **behavior monkey**  
 IT Sex  
 (long-term n-3 fatty acid deficiency effect on **behavioral** differences between, in rhesus **monkeys**)  
 IT **Behavior**  
 (dominant, long-term n-3 fatty acid deficiency effect on, in rhesus **monkeys**)

IT **Behavior**  
 (feeding, long-term n-3 fatty acid deficiency effect on, in rhesus monkeys)

IT **Behavior**  
 (lethargic, long-term n-3 fatty acid deficiency effect on, in rhesus monkeys)

IT **Behavior**  
 (locomotor, long-term n-3 fatty acid deficiency effect on, in rhesus monkeys)

IT **Fatty acids, biological studies**  
 RL: BIOL (Biological study)  
 (polyunsatd., n-3, long-term deficiency of, rhesus monkey behavior response to)

IT **Behavior**  
 (self-administration, long-term n-3 fatty acid deficiency effect on, in rhesus monkeys)

IT **Behavior**  
 (social, long-term n-3 fatty acid deficiency effect on, in rhesus monkeys)

L48 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1992:530280 HCAPLUS  
 DN 117:130280  
 ED Entered STN: 04 Oct 1992  
 TI Do essential fatty acids play a role in brain and **behavioral** development?  
 AU Wainwright, Patricia E.  
 CS Dep. Health Stud., Univ. Waterloo, Waterloo, ON, N2L 3G1, Can.  
 SO Neuroscience & Biobehavioral Reviews (1992), 16(2), 193-205  
 CODEN: NBREDE; ISSN: 0149-7634  
 DT Journal; General Review  
 LA English  
 CC 18-0 (**Animal Nutrition**)  
 AB A review, with 165 refs. The rapid accumulation of the long-chain n-3 PUFA in the brain during prenatal and preweaning development suggests that the provision of n-3 fatty acids to the developing brain may be necessary for normal growth and functional development. The exptl. work which addresses this question, most of which has been conducted on rodents, is assessed. The emphasis will be on studies which measure **behavioral** outcomes, and particular attention will be paid to methodol. issues which affect the interpretation of these data. An integration of the research findings will be presented and discussed in light of possible implications for therapeutic interventions.  
 ST review essential fatty acid brain development; **behavior**  
 development fatty acid nutrition review  
 IT Development, mammalian  
 (**behavior** and brain in, essential fatty acids role in)  
 IT **Behavior**  
 Brain  
 (development of, essential fatty acids in)  
 IT Fatty acids, biological studies  
 RL: BIOL (Biological study)  
 (essential, in **behavioral** and brain development)  
 IT **Fatty acids, biological studies**  
 RL: BIOL (Biological study)  
 (polyunsatd., n-3, in **behavioral** and brain development)

L48 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1990:157123 HCAPLUS  
 DN 112:157123  
 ED Entered STN: 28 Apr 1990  
 TI Polydipsia in rhesus **monkeys** deficient in omega-3 fatty acids

AU Reisbick, Sydney; Neuringer, Martha; Hasnain, Romana; Connor, William E.  
 CS Dep. Med., Oregon Health Sci. Univ., Portland, OR, 97201, USA  
 SO Physiology & Behavior (1990), 47(2), 315-23  
 CODEN: PHBHA4; ISSN: 0031-9384  
 DT Journal  
 LA English  
 CC 18-5 (Animal Nutrition)  
 AB Omega-3 fatty acids are a major component of neural membranes. They are essential nutrients for normal biochem. development of the brain and retina and may affect **behavior**. In studies of long-term dietary omega-3 fatty acid deficiency, a new effect of this deficiency was found in rhesus **monkeys**. Deficient **monkeys** visited the home cage drinking spout more frequently than controls, and drank more water over 24 h. The increase in intake was mirrored by increased combined output of urine + feces over 24 h, and was not due to spillage. The dietary deficiency greatly reduced omega-3 fatty acids in red blood cells but did not affect serum electrolyte levels. The changes in fluid intake and output may be related to direct or indirect effects on central or peripheral control mechanisms for drinking or excretion, which may be mediated by altered composition of neural or other membranes or changes in eicosanoid metabolism  
 ST omega3 fatty acid deficiency polydipsia  
 IT Diuresis  
     **Water drinking**  
     (ω-3 fatty acid deficiency effect on)  
 IT Erythrocyte  
     (ω-3 fatty acids of, ω-3 fatty acid deficiency effect on, polydipsia in relation to)  
 IT Thirst  
     (disorder, polydipsia, ω-3 fatty acid deficiency effect on)  
 IT **Fatty acids, biological studies**  
     RL: BIOL (Biological study)  
     (polyunsatd., n-3, deficiency of, polydipsia from)  
 IT 7732-18-5  
     RL: BIOL (Biological study)  
     (water drinking, ω-3 fatty acid deficiency effect on)

=> => fil medline  
 FILE 'MEDLINE' ENTERED AT 16:43:26 ON 15 DEC 2004

FILE LAST UPDATED: 9 DEC 2004 (20041209/UP). FILE COVERS 1950 TO DATE.

On February 29, 2004, the 2004 MeSH terms were loaded. See HELP RLOAD for details.

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2004 vocabulary. See <http://www.nlm.nih.gov/mesh/> and [http://www.nlm.nih.gov/pubs/techbull/nd03/nd03\\_mesh.html](http://www.nlm.nih.gov/pubs/techbull/nd03/nd03_mesh.html) for a description of changes.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all 160

L60 ANSWER 1 OF 1 MEDLINE on STN  
 AN 90007164 MEDLINE  
 DN PubMed ID: 2551801

TI General pharmacological studies on 5,8,11,14,17-eicosapentaenoic acid ethyl ester (EPA-E).  
 AU Sato M; Imada K; Iida S; Ohashi K; Yamaguchi K; Kosuzume H; Shibutani Y; Kunihiro Y  
 CS Fuji Central Research Laboratory, Mochida Pharmaceutical Co., Ltd., Shizuoka, Japan.  
 SO Nippon yakurigaku zasshi. Japanese journal of pharmacology, (1989 Jul) 94 (1) 35-47.  
 Journal code: 0420550. ISSN: 0015-5691.  
 CY Japan  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA Japanese  
 FS Priority Journals  
 EM 198911  
 ED Entered STN: 19900328  
 Last Updated on STN: 19900328  
 Entered Medline: 19891107  
 AB EPA-E, even at 3,000 mg/kg, p.o., did not affect the general **behaviors**, spontaneous locomotor activities, pentobarbital hypnosis and body temperature; and it did not elicit anticonvulsant, analgesic and muscle relaxant actions. It had no influence on spontaneous EEG activities, even at 3,000 mg/kg, i.d. EPA-E at concentrations up to 10(-4) M, did not affect the tonus or agonist-induced contraction of the isolated ileum, trachea, fundus and vas deferens. EPA-E had no influence on the spontaneous movement of isolated ileum or uterus. EPA-E did not affect the nictitating membrane contraction and intestinal propulsive motility, and it did not damage gastric mucosa nor elicit antiulcer action. EPA-E at 1,000 mg/kg were without effect on gastric secretory volume (SV), total acidity (TA) and pepsin activities (PA). However, EPA-E at 3,000 mg/kg significantly decreased SV and TA without significantly decreasing PA. EPA-E caused no changes in the respiration, blood pressure, heart rate and ECG at the doses up to 3,000 mg/kg; and it did not affect the heart rate and contractile force on the isolated atria at concentrations up to 10(-4) M. The intracutaneous injection of 2.0% EPA-E produced neither anesthetic nor irritative action. EPA-E did not elicit hemolytic action at 10(-4) M. EPA-E, even at 3,000 mg/kg, did not affect the neuro-muscular transmission, urine volume, urinary excretion of electrolytes and carrageenin edema. These results suggested that EPA-E has no noticeable effects on the central nervous, autonomic nervous, respiratory and cardiovascular systems and so on.  
 CT Animals  
     \*Behavior, Animal: DE, drug effects  
     Cats  
     \*Central Nervous System: DE, drug effects  
     \*Eicosapentaenoic Acid: PD, pharmacology  
     English Abstract  
     Gastrointestinal Motility: DE, drug effects  
     Guinea Pigs  
     \*Hemodynamic Processes: DE, drug effects  
     Mice  
     \*Muscle Contraction: DE, drug effects  
     Muscle, Smooth: DE, drug effects  
     Rabbits  
     Rats  
     \*Respiration: DE, drug effects  
 RN 1553-41-9 (Eicosapentaenoic Acid)

=> => fil biosis  
 FILE 'BIOSIS' ENTERED AT 16:47:40 ON 15 DEC 2004  
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FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNS) PRESENT  
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 9 December 2004 (20041209/ED)

FILE RELOADED: 19 October 2003.

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L68 ANSWER 1 OF 1 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
AN 1997:322770 BIOSIS  
DN PREV199799621973  
TI **Omega-3 fatty acid deficiency and behavior: A critical review and directions for future research.**  
AU Reisbick, Sydney [Reprint author]; Neuringer, Martha  
CS Oreg. Regional Primate Res. Cent., Beaverton, OR, USA  
SO Yehuda, S. [Editor]; Mostofsky, D. I. [Editor]. (1997) pp. 397-426.  
Handbook of essential fatty acid biology: Biochemistry, physiology, and behavioral neurobiology.  
Publisher: Humana Press Inc., Suite 808, 999 Riverview Drive, Totowa, New Jersey 07512, USA.  
ISBN: 0-89603-365-1.  
DT Book; (Book Chapter)  
General Review; (Literature Review)  
LA English  
ED Entered STN: 5 Aug 1997  
Last Updated on STN: 5 Aug 1997  
CC **Behavioral biology - Animal behavior** 07003  
Behavioral biology - Human behavior 07004  
Biophysics - Membrane phenomena 10508  
Physiology - Comparative 12003  
Metabolism - Lipids 13006  
Nutrition - Lipids 13222  
Endocrine - Neuroendocrinology 17020  
Nervous system - Physiology and biochemistry 20504  
Psychiatry - General, medical psychology and sociology 21001  
IT Major Concepts  
    **Behavior**; Endocrine System (Chemical Coordination and Homeostasis); Membranes (Cell Biology); Metabolism; Nervous System (Neural Coordination); Nutrition; Physiology  
IT Chemicals & Biochemicals  
    LINOLEIC ACID; DOCOSAHEXAENOIC ACID; DOPAMINE  
IT Miscellaneous Descriptors  
    **BEHAVIOR**; BIOCHEMISTRY AND BIOPHYSICS; DOCOSAHEXAENOIC ACID; DOPAMINE HYPOTHESIS; ESSENTIAL **FATTY ACIDS**; LEARNING; LINOLEIC ACID; MEMBRANE FUNCTION; NEURAL COORDINATION; NUTRITION; NUTRITIONAL DISEASE; **OMEGA-3**; **FATTY ACID DEFICIENCY**; **OMEGA-3**; **FATTY ACIDS**; PROSTAGLANDINS

ORGN Classifier

**Felidae** 85770

    Super Taxa

        Carnivora; Mammalia; Vertebrata; Chordata; Animalia

    Organism Name

        cat

    Taxa Notes

        Animals, Carnivores, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Vertebrates

ORGN Classifier

**Hominidae** 86215

    Super Taxa

        Primates; Mammalia; Vertebrata; Chordata; Animalia

    Organism Name

human  
 Taxa Notes  
 Animals, Chordates, Humans, Mammals, Primates, Vertebrates  
 ORGN Classifier  
 Muridae 86375  
 Super Taxa  
 Rodentia; Mammalia; Vertebrata; Chordata; Animalia  
 Organism Name  
 mouse  
 rat  
 Taxa Notes  
 Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals,  
 Rodents, Vertebrates  
 ORGN Classifier  
 Primates 86190  
 Super Taxa  
 Mammalia; Vertebrata; Chordata; Animalia  
 Organism Name  
 monkey  
 Primates  
 Taxa Notes  
 Animals, Chordates, Mammals, Nonhuman Mammals, Nonhuman Vertebrates,  
 Nonhuman Primates, Primates, Vertebrates  
 RN 60-33-3 (LINOLEIC ACID)  
 6217-54-5Q (DOCOSAHEXAENOIC ACID)  
 25167-62-8Q (DOCOSAHEXAENOIC ACID)  
 32839-18-2Q (DOCOSAHEXAENOIC ACID)  
 51-61-6 (DOPAMINE)

=> => fil wpix  
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FILE LAST UPDATED: 13 DEC 2004 <20041213/UP>  
 MOST RECENT DERWENT UPDATE: 200480 <200480/DW>  
 DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

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AN 2004-804565 [79] WPIX  
 DNC C2004-280836  
 TI Animal feed composition useful e.g. for improving development of animal species e.g. livestock species such as cow and sheep, comprises microbial biomass containing long chain **omega-3 fatty acid**.  
 DC B05 C03 D13 D16  
 IN EDWARDS, S  
 PA (UYNE-N) UNIV NEWCASTLE-UPON-TYNE  
 CYC 108  
 PI WO 2004095940 A1 20041111 (200479)\* EN 29 A23K001-00 <--  
     RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE  
     LS LU MC MW MZ NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW  
     W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE  
     DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG  
     KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ  
     OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG  
     US UZ VC VN YU ZA ZM ZW

ADT WO 2004095940 A1 WO 2004-GB1724 20040422  
 PRAI GB 2003-10521 20030508; GB 2003-9453 20030425

IC ICM **A23K001-00**

ICS **A23K001-16; A23K001-18**

AB WO2004095940 A UPAB: 20041208

NOVELTY - An animal feed composition comprises a microbial biomass containing a long chain **omega -3 fatty acid**.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for improving the development of an animal species comprising:

(1) administering to the animal, a composition as above, where the **fatty acid** is provided during late gestation and/or during lactation; and

(2) allowing an infant of the species to suckle on the animal administered the long chain **fatty acid**.

ACTIVITY - None given.

MECHANISM OF ACTION - None given.

USE - As animal feed used during late gestation or during lactation of an animal; for improving the development of an animal species, preferably livestock species, especially cow, sheep (particularly pregnant sheep), goat, horse, mink, or pig (particularly pregnant pig), companion mammal (particularly dog, cat hamster, mouse, rabbit or pot bellied pigs) (all claimed).

ADVANTAGE - The composition increases the viability, weight, development and **behavior** of animals. The supplementation of the sow or sheep diet with the composition results in piglets or lambs that show increased post-weaning weight, which has been associated in previous work with improved health and **behavioral** patterns. The supplementation of sow diet with docosahexaenoic acid during late gestation improves piglet viability; feed intake/growth rate after weaning; and final piglet weight at around 8 weeks of age.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B04-B01B; B04-F09; B05-B01P; B10-C04E; B14-E11; C04-B01B; C04-F09; C05-B01P; C10-C04E; C14-E11; D03-G04

TECH UPTX: 20041208

TECHNOLOGY FOCUS - FOOD - Preferred Composition: The animal feed is a gestation feed, weaning feed or lactation feed.

TECHNOLOGY FOCUS - BIOLOGY - Preferred Components: The microbial biomass is an algal biomass. The algal biomass is derived from an edible algae selected from *Cryptothecodium* spp., *Phaedactylum* spp., *Isochrysis* spp., *Schizochytrium* spp., *Thaustochytrium* spp. or *Ulkenia* spp..

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Composition: The long chain **omega-3 fatty acid** is present at not less than 3 g/kg feed.

Preferred Components: The long chain **fatty acid** is a free **fatty acid** or its ester. The free **fatty acid** is selected from triglyceride, diglyceride, monoglyceride, phospholipids, glycolipid, sulpholipid or sphingolipid. The long chain **fatty acid** is provided during the period up until weaning.

ABEX UPTX: 20041208

SPECIFIC COMPOUNDS - The long chain **omega-3 fatty acid** is docosahexaenoic acid.

ADMINISTRATION - The **fatty acid** is administered during late gestation and during lactation period. The docosahexaenoic acid is administered to the pig once daily during late gestation or twice daily during the lactation period (all claimed).

EXAMPLE - 89 Treatment ewes that received biomass containing docosahexaenoic acid supplement exhibited significantly longer gestation length than 83 controls.

L84 ANSWER 2 OF 14 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
 AN 2004-642580 [62] WPIX  
 DNC C2004-231119  
 TI Nutritional supplement for companion animals, e.g. **dogs** or **cats**, comprises microencapsulated powder derived from fish oil and/or sea oil having eicosapentaenoic acid and docosahexaenoic acid for increase serum levels.  
 DC D13  
 IN MACKINNON, W  
 PA (MACK-I) MACKINNON W  
 CYC 108  
 PI WO 2004075653 A1 20040910 (200462)\* EN 28 A23K001-16 <--  
 RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE  
 LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW  
 W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE  
 DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG  
 KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ  
 OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG  
 US UZ VC VN YU ZA ZM ZW  
 CA 2420266 A1 20040828 (200462) EN A23K001-16 <--  
 ADT WO 2004075653 A1 WO 2004-CA160 20040205; CA 2420266 A1 CA 2003-2420266  
 20030228  
 PRAI CA 2003-2420266 20030228  
 IC ICM A23K001-16  
 ICS A23K001-18  
 AB WO2004075653 A UPAB: 20040928  
 NOVELTY - A nutritional supplement comprises microencapsulated powder derived from fish oil and/or sea oil having eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) for increase of serum levels of EPA and DHA in the companion animals.  
 USE - The invention is for companion animals (claimed), e.g. **dog** and **cat**, to prevent or treat renal disease, dermatological disease, or cardiovascular disease. It is used as an anti-inflammatory in companion animals. (All claimed)  
 ADVANTAGE - The invention provides positive health effects for animals associated with **omega-3 fatty acids**. It is convenient to use, retains freshness, and avoids off or tainted tastes in the relatively small quantities that are associated with companion animals.  
 Dwg.0/0  
 FS CPI

FA AB  
 MC CPI: D03-G; D03-H01T  
 TECH UPTX: 20040928  
 TECHNOLOGY FOCUS - FOOD - Preferred Composition: The nutritional supplement contains (mg/g) EPA (approximately 182), and DHA (135). Preferred Process: The nutritional supplement is administered by top dressing.  
 Preferred Component: The nutritional supplement is in a foil package.

L84 ANSWER 3 OF 14 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
 AN 2004-339652 [31] WPIX  
 DNC C2004-128813  
 TI Composition useful for influencing **behavior** e.g. memory, learning and disorientation in young, adult or aged pet animals (e.g. dog or cat) comprises an **omega-3 fatty acid** or its mixture and a carrier.  
 DC D13 E17  
 IN DODD, C E; FRITSCH, D A; JEWELL, D; ZICKER, S C  
 PA (DODD-I) DODD C E; (FRIT-I) FRITSCH D A; (JEWEL-I) JEWELL D; (ZICK-I) ZICKER S C  
 CYC 1  
 PI US 2004068010 A1 20040408 (200431)\* 3 A61K031-202  
 ADT US 2004068010 A1 US 2002-65326 20021003  
 PRAI US 2002-65326 20021003  
 IC ICM A61K031-202  
 AB US2004068010 A UPAB: 20040514  
 NOVELTY - A composition comprises an **omega-3 fatty acid** or its mixture and a carrier.  
 ACTIVITY - Nootropic; Neuroprotective.  
 MECHANISM OF ACTION - None given.  
 o USE - For influencing **behavior** in young, adult or aged pet animals (e.g. dog or cat, which does not have cancer or arthritis and has an age of 1 - 7 years) (all claimed). The **behavior** includes memory, learning, disorientation (including at least one of awareness of surroundings, circling, aimless activity and inappropriate vocalization), interaction including at least one of family recognition, animal recognition, family interaction, animal interaction, greeting enthusiasm, attention seeking, response to verbal commands, activity such as agility and level of activity, irregular sleep pattern, house training and any **behavior** associated with age related cognition decline (ARCD).  
 Dwg.0/0  
 FS CPI  
 FA AB; DCN  
 MC CPI: D03-G; E10-C04H  
 ABEX UPTX: 20040514  
 ADMINISTRATION - The composition is administered systemically by oral ingestion. No dosage given.  
 EXAMPLE - A composition comprised (weight%): protein (15 - 23), fat (7 - 15), carbohydrate (40 - 60) and eicosapentaenoic acid/docosahexaenoic acid EPA/DHA (1 - 5).  
 L84 ANSWER 4 OF 14 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
 AN 2004-080285 [08] WPIX  
 CR 2004-592811 [57]  
 DNC C2004-032946  
 TI **Fatty acid** calcium salt product useful as animal nutritional supplements, comprises at least one **omega-3 fatty acid**.  
 DC B05 D13  
 IN FREDERIKSEN, E D; STROHMAIER, G K; LUCHINI, N D; VARCHO, M A  
 PA (FRED-I) FREDERIKSEN E D; (STRO-I) STROHMAIER G K; (NORE-N) NOREL ACQUISITION CORP

CYC 107  
 PI US 2003130348 A1 20030710 (200408)\* 3 A61K031-202  
 WO 2004046086 A1 20040603 (200436) EN C07C231-00  
 RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE  
 LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW  
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE  
 DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG  
 KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM  
 PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US  
 UZ VC VN YU ZA ZM ZW  
 AU 2003291054 A1 20040615 (200470) C07C231-00  
 ADT US 2003130348 A1 Provisional US 2001-334471P 20011116, US 2002-299337  
 20021118; WO 2004046086 A1 WO 2003-US36821 20031118; AU 2003291054 A1 AU  
 2003-291054 20031118  
 FDT AU 2003291054 A1 Based on WO 2004046086  
 PRAI US 2001-334471P 20011116; US 2002-299337 20021118  
 IC ICM A61K031-202; C07C231-00  
 ICS C07C053-126  
 AB US2003130348 A UPAB: 20041101  
 NOVELTY - A **fatty acid** calcium salt product (I)  
 comprises at least one **omega-3 fatty acid** (1-25 weight%) selected from decosahexanoic acid (DHA),  
 eicosapentanoic acid (EPA), decosapentanoic acid (DPA) or linoleic acid (LA).  
 ACTIVITY - None given.  
 MECHANISM OF ACTION - Animal fertility promoter.  
 USE - For enriching the **omega-3 fatty acid** content of a variety of food or food products including  
 pet food products, as rumen-inert feed supplements for ruminants  
 (e.g. **cattle**), as nutritional supplement for humans, other  
 mammals and non-mammals, including birds and fish and also in animal  
 fertility enhancement.  
 ADVANTAGE - (I) having higher levels of **omega-3 fatty acid** can be prepared as a free-flowing and stable  
 product.  
 Dwg.0/0  
 FS CPI  
 FA AB; DCN  
 MC CPI: B10-C04E; D03-G01; D03-H01T2  
 TECH UPTX: 20040202  
 TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Product: Compounds of (I)  
 can be produced following the high temperature saponification process as  
 disclosed in US6229031.  
 L84 ANSWER 5 OF 14 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
 AN 2003-903519 [82] WPIX  
 DNN N2003-721399 DNC C2003-256976  
 TI Prediction of fatty acid enrichment in **canines**, includes  
 calculating fatty acid level using new equations and constants.  
 DC B04 C07 D13 T01  
 IN BAUER, J E; WALDRON, M K  
 PA (NEST) NESTEC SA; (TEXA) UNIV TEXAS A & M SYSTEM  
 CYC 99  
 PI WO 2003092405 A2 20031113 (200382)\* EN 30 A23K001-18 <--  
 RW: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO  
 SE SI SK TR  
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK  
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT  
 RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA  
 ZM ZW  
 AU 2003232744 A1 20031117 (200442) A23K001-18 <--  
 ADT WO 2003092405 A2 WO 2003-EP4902 20030505; AU 2003232744 A1 AU 2003-232744

20030505

FDT AU 2003232744 A1 Based on WO 2003092405

PRAI US 2002-378280P 20020506

IC ICM A23K001-18

AB WO2003092405 A UPAB: 20031223

NOVELTY - Prediction of tissue levels of a population of **fatty acid canines** achieved by feeding a proposed diet of predetermined **fatty acid** composition, comprises calculating a predicted n-6 phospholipid **fatty acid** level as a percentage of total highly unsaturated **fatty acids** (HUFA) computed by (I).

DETAILED DESCRIPTION - Prediction of tissue levels of a population of **fatty acid canines** achieved by feeding a proposed diet of predetermined **fatty acid** composition, comprises calculating a predicted n-6 phospholipid **fatty acid** level as a percentage of total HUFA computed by equation (I).

en%3 = alpha -linoleic acid %daily energy;

en%6 = linoleic acid %daily energy;

en%0 = other **fatty acids** %daily energy;

en%H6 = n-6 HUFA %daily energy;

en%H3 = n-3 HUFA %daily energy;

PC6 = 0.036;

Co = 9;

Ks = 0.14;

HI3 = 0.1;

HC6 = 4;

HC3 = 11;

KI6 = 0.72 (plasma) or 0.034 (neutrophils), and

KI3 = 0.34 (plasma) or 0.8 (neutrophils).

INDEPENDENT CLAIMS are also included for:

(a) a diet formulated by the process;

(b) determining compliance with a prescribed diet for an individual **canine** animal comprising determining an expected **fatty acid** level for the prescribed diet, and

(c) a programmable device comprising input and output mechanisms, and a calculator.

USE - Used for predicting tissue levels of a population of **fatty acids in canines**.

ADVANTAGE - The method allows the amount of HUFAs in a specific **canine** to be calculated based on the **canine's** diet without requiring costly and time-consuming sample analysis.

Dwg.0/4

FS CPI EPI

FA AB; GI

MC CPI: B11-C09; C11-C09; D03-G

EPI: T01-J01; T01-J08A

TECH UPTX: 20031223

TECHNOLOGY FOCUS - INSTRUMENTATION AND TESTING - Preferred Process: A predicted n-3 phospholipid **fatty acid** level is calculated by equation (II).

The prediction process further comprises comparing the predicted % (n-6) HUFA to a predetermined level, and determining the proposed diet to be acceptable if the predicted % (n-6) HUFA does not exceed the predetermined level.

The predicted percentage of linoleic acid in plasma is calculated by the equation  $-0.62(\text{en} \% 6)2+2.75(\text{en} \% 6)+4.04$  (III), and that of alpha-linoleic acid by the equation  $-0.012(\text{en} \% 3)2+1.11(\text{en} \% 3)+0.02$  (IV).

PC3 = 0.29;

HI6 = 0.01.

The predetermined level is 75%, 65%, or 50%. The predicted % (n-6) HUFA is greater than a predetermined level.

AN 2002-255591 [30] WPIX

CR 2000-292965 [25]; 2001-388872 [41]

DNC C2002-076197

TI Providing nutrition to critical care animals such as **dogs** or **cats**, by administering artificially produced **canine** or **feline** milk substitute composition comprising specified percentage of protein, fat and carbohydrates.

DC B04 C03 D13

IN LEPINE, A J

PA (LEPI-I) LEPINE A J

CYC 1

PI US 2002018828 A1 20020214 (200230)\* 8 A23C009-00

ADT US 2002018828 A1 CIP of US 1998-163778 19980930, Cont of US 1999-362401  
19990728, US 2001-829168 20010409

FDT US 2002018828 A1 Cont of US 6245379

PRAI US 1999-362401 19990728; US 1998-163778 19980930;  
US 2001-829168 20010409

IC ICM A23C009-00

AB US2002018828 A UPAB: 20021120

NOVELTY - A method for providing nutrition (M) to critical care **canines** and **felines** involves administering an artificially produced **canine** or **feline** milk substitute composition (I).

DETAILED DESCRIPTION - A method for providing nutrition to a critical care **canine** or **feline** comprises administration of artificially produced **canine** milk substitute composition or **feline** milk substitute composition (I), respectively. The **canine** milk substitute composition comprises on a dry matter basis, from about 35-45% protein, 25-35% fat, and 10-25% carbohydrates. The **feline** milk substitute composition comprises on a dry matter basis, from about 30-50% protein, 25-50% fat, and 10-25% carbohydrates, where the source of protein comprises casein and whey in weight ratio of about 1:1.

USE - (M) is useful for providing nutrition to critical care animals such as **dogs** and **cats** (claimed).

ADVANTAGE - The **canine** or **feline** milk substitute composition provides high quality nutrient sources, are highly digestible, and provide a relatively high energy density. The milk replacers provide unique amino acid and fatty acid profiles. To determine the effect of milk composition on growth and body composition of puppies, forty colony bred Beagle puppies were randomly assigned to 3 treatments: bitch milk (CTL), milk replacer I (MR-I) (comprising (in percentage) water (80.0), Na/Ca caseinate (5.233), whey protein concentrate (3.491), maltodextrin (2.646), butter oil (2.412), canola oil (1.764), mineral premix1 (1.147), lactose (1.134), corn oil (0.869), dried egg yolk (0.506), emulsifier (0.200), vitamin premix2 (0.128), arachidonic acid supplement (0.100), fructooligosaccharide (0.100), L-histidine HCl (0.090), L-arginine (0.060), choline chloride (0.055), docosahexaenoic acid (DHA) supplement (0.040), and ascorbic acid (0.025)), and milk replacer II (MR-II) comprising 33% protein and 40% fat. Milk replacer treatments were subsequently fed to the puppies every 3 hours for days 1-2 and decreased to 4 feedings/day for the remainder of the study (30 days). No differences were detected in intake between the MR puppies, however, puppies fed MR-I had increased average daily weight gain and gain efficiency over MR-II fed puppies, i.e., when the amount of product consumed was measured against the weight gained, MR-I fed puppies had a greater increase in body weight, indicating that the MR-I formulation was better at meeting the growth needs of puppies. The body composition of puppies fed MR-I did not differ from CTL puppies in body fat percentage, but was higher in lean tissue than both CTL and MR-II. Puppies fed MR-II were found to have the highest body fat and lowest lean tissue. These data indicated that the MR-I formulation, which was more similar to batch milk in fatty acid profile and amino acid profile, resulted in enhanced structural tissue growth

indicating an improved nutritional status in neonatal puppies.

Dwg.0/0

CPI

AB; DCN

MC CPI: B04-B01C1; B04-C02B; B04-N02; B06-D01; B07-A02B; B07-D09; B10-A17; B10-B01B; B10-B02C; B10-C04E; C04-B01C1; C04-C02B; C04-N02; C06-D01; C07-A02B; C07-D09; C10-A17; C10-B01B; C10-B02C; C10-C04E; D03-B11; D03-G; D03-H01T

TECH UPTX: 20020513

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Method: In (M), the source of protein comprises casein and whey in a weight ratio of about 70:30. The composition comprises about 38% protein, 28% fat and 19% carbohydrates. The source of fat is selected from corn oil, canola oil, butter oil, arachidonic acid, docosahexaenoic acid (DHA), or their blends. The canine milk substitute composition contains fatty acids expressed as a percentage of total fatty acids on a dry matter basis, of from 15-19% of palmitic acid, 5-9% stearic acid, 34-38% oleic acid, 17-21% linoleic acid, 1-4% alpha-linolenic acid, 0.5-2% arachidonic acid, 0.2-1% DHA, 2-5% OMEGA-3-fatty acids, 18-22% OMEGA-6-fatty acids, and 1-4% trans fatty acids. The amino acids are expressed as a percentage of total essential amino acids on a dry matter basis of from about 6-10% arginine, 4-8% histidine, 8-12% isoleucine, 16-20% leucine, 13-17% lysine, 2-7% methionine, 6-10% phenylalanine, 8-12% threonine, 1-4% tryptophan, 9-13% valine, 2-5% cystine, and 2-6% tyrosine. The canine milk substitute composition contains from about 4-8% by weight lactose, 0.50% by weight fructooligosaccharide, 27-37% by weight fatty acids, and 15-25% by weight essential amino acids. In the feline milk substitute composition, the protein is present in amounts from 35-45%, preferably 40%, the fat is present in amounts from about 30-40%, preferably 35%, and the carbohydrates are present in amounts from about 13-20%, preferably 15-17%. The source of carbohydrates comprises a combination of lactose and maltodextrin. The lactose or maltodextrin is present in an amount of from about 6.5-10%, preferably 7.5-8.5%. The lactose and maltodextrin are present in substantially equal amounts. The composition further comprises arachidonic acid, DHA, butter oil, canola oil and corn oil. The composition is expressed as a percentage of total fatty acids on a dry matter basis, from about 17-20%, preferably 18% linoleic acid, 0.5-1.0%, preferably 0.7% of arachidonic acid, and 0.2-0.4%, preferably 0.3% of DHA. The composition is expressed as a percentage of total essential amino acids on a dry matter basis, from about 4.0-8.0%, preferably 6.5% arginine, 1.0-3.0%, preferably 1.7% tryptophan, and from about 2.0-5.0%, preferably 3.7% valine.

ABEX UPTX: 20020513

EXAMPLE - A canine milk substitute was prepared by mixing (in percentage) water (80.0), Na/Ca caseinate (5.233), whey protein concentrate (3.491), maltodextrin (2.646), butter oil (2.412), canola oil (1.764), mineral premix1 (1.147), lactose (1.134), corn oil (0.869), dried egg yolk (0.506), emulsifier (0.200), vitamin premix2 (0.128), arachidonic acid supplement (0.100), fructooligosaccharide (0.100), L-histidine HCl (0.090), L-arginine (0.060), choline chloride (0.055), docosahexaenoic acid (DHA) supplement (0.040), and ascorbic acid (0.025). To compare above formulation with currently available milk replacer products, an analysis of several commercially available bitch milk replacer formulas was conducted. The canine milk substitute composition was found to be much closer to natural bitch milk than other products.

L84 ANSWER 7 OF 14 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 2002-162933 [21] WPIX

DNC C2002-050179

TI Pet food composition for domesticated cats and dogs pet food recommended with kosher diet for health

and/or spiritual reasons, comprises preset amount of kosher meat, carbohydrates-, fiber-, fat-sources and fatty acids.

DC D13  
IN LACOMBE, M; MICHELS, M  
PA (LACO-I) LACOMBE M; (MICH-I) MICHELS M

CYC 1  
PI US 6277435 B1 20010821 (200221)\* 4 A23L001-31  
ADT US 6277435 B1 US 2001-793659 20010226  
PRAI US 2001-793659 20010226  
IC ICM A23L001-31  
AB US 6277435 B UPAB: 20020403

NOVELTY - A **pet** food composition comprises 15-60 weight % of kosher meat, carbohydrates source, fiber source, fat source and at least 2.44% of omega -6 **fatty acids** and 0.49% omega -3 **fatty acids**. The kosher meat is obtained from a healthy animal, washed in cold water and salted.

USE - In **pet** food, specifically domesticated **cats** and **dogs** for which a kosher diet is recommended for health and/or spiritual reasons.

ADVANTAGE - The **pet** food is highly palatable with a high digestibility factor, promoting the **pet**'s health (more nutrients absorbed with less efforts eliminating). **Pet** owners deal with a lesser amount of waste (feces) and enjoys the companionship of a healthier **pet**. **Pet** owners can share their philosophical believes with their **pets**. **Pet** food manufacture will find an immediate market amongst Jewish **pet** owners and other **pet** owners concerned with their **pets** health. The **pet** food is highly nutritional for **pets** regardless of their ages, ailments, or levels of activity. The **pet** food does not promote debilitating diseases. The use of cold water and an extensive salting and soaking process lessen the risk of formation of nitrosamines, cancer-causing agents. Salting also reduces or eliminates some types of bacteria, especially campylobacter, a common contaminant of poultry. Also risk of salmonella in chicken is reduced. A high quality meat-based natural **pet** food is obtained, as kosher poultry is raised without hormones or growth stimulants. The **pet** food can be served daily, with noticeable improvements to the animal's health, can easily be mass manufactured at a reasonable cost once the initial koshering process is completed. The product will be instantly embraced by people of Jewish faith who wish to keep a kosher home.

Dwg.0/2

FS CPI  
FA AB  
MC CPI: D03-G03; D03-G04  
TECH UPTX: 20020403

TECHNOLOGY FOCUS - FOOD - Preferred Ingredients: The carbohydrate source consists of rice and flour, the fiber source consists of carrots, and the fat source consists of a kosher meat source. The kosher meat is prepared in accordance with kosher guidelines.

L84 ANSWER 8 OF 14 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
AN 2002-082821 [11] WPIX

DNC C2002-025012  
TI **Pet** food composition useful for reducing inflammatory responses in **cats** comprises specific fatty acids in a specific weight ratio.

DC B04 C03 D13  
IN HAYEK, M G; REINHART, G A  
PA (HAYE-I) HAYEK M G; (REIN-I) REINHART G A; (IAMS-N) IAMS CO  
CYC 96  
PI WO 2001082720 A1 20011108 (200211)\* EN 20 A23K001-16 <--  
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ  
NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM  
 DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC  
 LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE  
 SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

US 2001051206 A1 20011213 (200211) A23D009-00  
 AU 2001057435 A 20011112 (200222)  
 EP 1280416 A1 20030205 (200310) EN A23K001-16 <--  
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
 RO SE SI TR

BR 2001010534 A 20030401 (200327) A23K001-16 <--  
 TW 542698 A 20030721 (200406) A23K001-00 <--  
 JP 2004510404 W 20040408 (200425) 34 A23K001-16 <--  
 MX 2002010767 A1 20031101 (200468) A23K001-16 <--

ADT WO 2001082720 A1 WO 2001-US13889 20010430; US 2001051206 A1 Provisional US  
 2000-201029P 20000501, US 2001-845941 20010430; AU 2001057435 A AU  
 2001-57435 20010430; EP 1280416 A1 EP 2001-930947 20010430, WO  
 2001-US13889 20010430; BR 2001010534 A BR 2001-10534 20010430, WO  
 2001-US13889 20010430; TW 542698 A TW 2001-110342 20010430; JP 2004510404  
 W JP 2001-579611 20010430, WO 2001-US13889 20010430; MX 2002010767 A1 WO  
 2001-US13889 20010430, MX 2002-10767 20021031

FDT AU 2001057435 A Based on WO 2001082720; EP 1280416 A1 Based on WO  
 2001082720; BR 2001010534 A Based on WO 2001082720; JP 2004510404 W Based  
 on WO 2001082720; MX 2002010767 A1 Based on WO 2001082720

PRAI US 2000-201029P 20000501; US 2001-845941 20010430

IC ICM A23D009-00; A23K001-00; A23K001-16  
 ICS A23K001-18; A61K031-202; A61K031-23; A61K031-232;  
 A61P029-00; A61P037-00; A61P043-00

AB WO 200182720 A UPAB: 20020215  
 NOVELTY - A **pet** food composition comprises **fatty acids** such as **omega-6** and **omega-3 fatty acids** in a weight ratio of 5:1. The majority of **omega-3 fatty acids** comprises alpha-linolenic acid. The composition comprises about 7 - 14 weight% of total fat.  
 ACTIVITY - Antiinflammatory.  
 MECHANISM OF ACTION - None given.  
 USE - For reducing inflammatory responses in **cats** (claimed); for **felines**.  
 ADVANTAGE - The composition reduces inflammatory responses and provides less immunosuppression compared to **cats** fed a **pet** food composition containing a marine-based source of **omega-3 fatty acids**. The composition may also be fortified with vitamins and micronutrients so that diet consumed provides for the other general nutritional needs of the **cat** e.g. kibble, moist chunk foods, moist canned **cat** food, or **cat** treats.

Dwg.0/5

FS CPI

FA AB; DCN

MC CPI: B04-B01C1; B10-C04E; B14-E11; B14-G01; B14-S12; C04-B01C1; C10-C04E;  
 C14-E11; C14-G01; C14-S12; D03-G; D03-G01

TECH UPTX: 20020215  
 TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Composition: The composition comprises (wt.%) **omega-6 fatty acid** (20) and **omega-3 fatty acids** (4). Preferred Components: The **omega-3 fatty acids** further comprise eicosapentaenoic acid and/or docosahexaenoic acid. The source of alpha-linolenic acid is such as flaxseed oil, which is a plant based source of **omega-3 fatty acids**.

ABEX UPTX: 20020215  
 EXAMPLE - Female tabby **cats** (19 - 20 months old with an average body weight of 4.9 kg) were adapted to a nutritionally balanced diet for 12 weeks prior to assignment to groups of 14 **cats** per group in 2

groups i.e. cat fed with the control diet and cat fed with a diet containing flaxseed oil. The feeding protocol lasted for 12 weeks. All the diets contained 22 weight% total lipids. The control diet comprised (%) lipid (a) (22), palmitic acid (16:0) (b) (23.0), linoleic acid (18:2n-6) (c) (18.8), gamma-linolenic acid (18:3n-6) (d) (0.2), arachidonic acid (20:4n-6) (e) (0.8), alpha-linolenic acid (18:3n-3) (f) (0.8), eicosapentaenoic acid (20:5n-3) (g) (0.03), docosahexaenoic acid (22:6n-3) (h) (0.09), total n-6 polyunsaturated fatty acids (POEA) (i) (20.3), total n-3 PUFA (j) (1.1), n-6:n-3 ratio (k) (20:1), vitamin E (mg/kg) (l) (110). The diet containing flaxseed oil (test) comprised (a) (22), (b) (22.3), (c) (18.9), (d) (0.2), (e) (0.7), (f) (4.0), (g) (0.10), (h) (0.13), (i) (20.4), (j) (4.5), (k) (5:1), (l) (110). The control diet contained poultry fat which was high in n-6 PUFA (n-6:n-3 PUFA ratio of 20:1) while the test diet contained flaxseed oil which was mixed with poultry fat to obtain n-6:n-3 PUFA ratio of 5:1. The results showed that the fatty acid composition (%) in plasma for control/test diet for 6 and 12 weeks was alpha-linolenic acid (ALNA) = 0.30/1.62 and 0.31/1.50; EPA (eicosapentaenoic acid) = 0.12/0.11 and 0.11/0.12; DHA docosahexaenoic acid) = 0.77/0.55 and 0.64/0.59; n-6 PUFA = 38.7/37.8 and 39.2/39.2; n-3 PUFA = 1.42/2.47 and 1.25/2.40 and n-6:n-3 = 27.93/15.44 and 31.49/16.46 respectively.

L84 ANSWER 9 OF 14 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
 AN 2002-048985 [06] WPIX  
 DNC C2002-013619  
 TI Improving bone modelling and chondrocyte functioning in growing canine comprises feeding pet food composition comprising source of n-6 and n-3 fatty acids  
 DC B05 C03 D13  
 IN HAYEK, M G; LEPINE, A J; REINHART, G A; WATKINS, B A  
 PA (HAYE-I) HAYEK M G; (LEPI-I) LEPINE A J; (REIN-I) REINHART G A; (WATK-I) WATKINS B A; (IAMS-N) IAMS CO  
 CYC 95  
 PI WO 2001060356 A1 20010823 (200206)\* EN 18 A61K031-20  
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ  
 NL OA PT SD SE SL SZ TR TZ UG ZW  
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM  
 DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC  
 LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE  
 SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
 US 2002001640 A1 20020103 (200207) A23L001-00  
 AU 2001038423 A 20010827 (200216) A61K031-20  
 US 6426100 B2 20020730 (200254) A23K001-18 <--  
 EP 1255546 A1 20021113 (200282) EN A61K031-20  
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
 RO SE SI TR  
 US 2003031753 A1 20030213 (200314) A01K001-00  
 JP 2003522788 W 20030729 (200358) 20 A61K031-202  
 MX 2002007976 A1 20030101 (200373) A23K001-16 <--  
 ADT WO 2001060356 A1 WO 2001-US5094 20010216; US 2002001640 A1 Provisional US 2000-183294P 20000217, US 2001-785901 20010216; AU 2001038423 A AU 2001-38423 20010216; US 6426100 B2 Provisional US 2000-183294P 20000217, US 2001-785901 20010216; EP 1255546 A1 EP 2001-910860 20010216, WO 2001-US5094 20010216; US 2003031753 A1 Provisional US 2000-183294P 20000217, Cont of US 2001-785901 20010216, US 2002-173141 20020617; JP 2003522788 W JP 2001-559454 20010216, WO 2001-US5094 20010216; MX 2002007976 A1 WO 2001-US5094 20010216, MX 2002-7976 20020816  
 FDT AU 2001038423 A Based on WO 2001060356; EP 1255546 A1 Based on WO 2001060356; US 2003031753 A1 Cont of US 6426100; JP 2003522788 W Based on WO 2001060356; MX 2002007976 A1 Based on WO 2001060356

PRAI US 2000-183294P 20000217; US 2001-785901 20010216;  
 US 2002-173141 20020617

IC ICM A01K001-00; A23K001-16; A23K001-18; A23L001-00;  
 A61K031-20; A61K031-202  
 ICS A01K013-00; A61P019-00; A61P043-00

AB WO 200160356 A UPAB: 20020128

NOVELTY - Improving bone modelling and chondrocyte functioning in a growing **canine** comprises feeding the **canine** a pet food composition comprising a source of n-6 and n-3 fatty acids and optionally 20-40 weight% crude protein, 4-30 weight% fat, 2-20 weight% total dietary fiber and a source of carbohydrate.

ACTIVITY - Osteopathic; Dermatological; Antiinflammatory.

MECHANISM OF ACTION - None given in source material.

USE - Used for improving bone health and promoting bone development in growing **canines**. The composition is also used for promoting synthesis and tissue accumulation of down regulating elements of inflammation and tissue accumulation of anti-inflammatory PGE3 series prostaglandins. The n-6 and n-3 fatty acids are known to have a beneficial effect on **canines** with inflammatory skin conditions (see CA2145716).

32 Eight week old purpose bred puppies were allocated four dietary treatments differing in fatty acid source. Treatment diets were isonitrogenous and isocaloric. The **canine** growth diet was formulated to contain different ratios of n-6/n-3 fatty acids, 5:1, 5:1, 50:1 and 25:1 using lipid sources comprising docosahexaenoic acid (DHA), menhaden oil and safflower oil source (Treatment 3 = DHA; Treatment 4 = DHA). Puppies were conditioned for 2 weeks followed by feeding the treatment diets for 16 weeks.

Results indicated that diets rich in n-3 fatty acids reduced pro-inflammatory eicosanoid (PGE2) synthesis and promote tissue accumulation of down regulating elements of inflammation in bone compartments.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B04-B01C1; B04-B01C2; B10-C04E; B14-N01; B14-S12; C04-B01C1;  
 C04-B01C2; C10-C04E; C14-N01; C14-S12; D03-G

TECH UPTX: 20020128

TECHNOLOGY FOCUS - FOOD - Preferred Composition: The ratio of n-6 fatty acids to n-3 fatty acids is 20:1-1:1, preferably 10:1-5:1, especially 8:1-5:1. At least 22 wt.% of the total fatty acids in the composition are n-6 fatty acids and at least 3 wt.% of the total fatty acids in the composition are n-3 fatty acids.

The composition comprises 0.88-6.6 wt.% n-6 fatty acids and 0.16-1.2 wt.% n-3 fatty acids, on a dry matter basis.

The n-3 fatty acids comprise eicosapentaenoic acid or docosahexaenoic acid.

The composition also comprises 1-11 wt.% of supplemental total dietary fiber of fermentable fibers having an organic matter disappearance of 15-60 wt.% when fermented by fecal bacteria for 24 hours.

L84 ANSWER 10 OF 14 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
 AN 2002-012137 [02] WPIX

DNC C2002-003202

TI Animal feed formulations and supplements, especially for dogs, cats and horses, are produced using fractions of flesh of green and blue edible mussels.

DC D13

IN OLBERTS, M

PA (OLBE-I) OLBERTS M

CYC 1

PI DE 10047563 A1 20011025 (200202)\* 4 A23K001-10 &lt;--

ADT DE 10047563 A1 DE 2000-10047563 20000922

PRAI DE 2000-10020012 20000422

IC ICM A23K001-10

ICS A23K001-18

AB DE 10047563 A UPAB: 20020109

NOVELTY - Production of healthy, health- and performance-promoting animal feed, suited to the type of animal, uses fractions of the flesh of the green edible mussel *Perna Canaliculus* and the blue edible mussel *Mytilus edulis*, especially in the production of feed for **dogs**, **cats** and/or horses.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) animal feed formulations, especially for **dogs** and

**cats**;

(2) animal feed formulations, especially for horses;

(3) animal feed supplements containing 50-98% flesh and/or extract of *Perna Canaliculus*;

(4) feed supplements for **dogs**, **cats** and horses;

and

(5) feed supplements for **cats**.

USE - The products are animal feed or feed supplements, especially for **dogs**, **cats** and horses (all claimed).

ADVANTAGE - The products, which contain a high fraction of unsaturated **fatty acids**, e.g. **omega**

3 and omega 6, promote the health and performance, especially growth, condition and state, of the animals and can be produced relatively economically.

Dwg.0/0

FS CPI

FA AB

MC CPI: D03-G05

TECH UPTX: 20020109

TECHNOLOGY FOCUS - FOOD - Preferred Process: The flesh of the mussels is separated from the shells and dried carefully, especially freeze dried, then the oil present is extracted by a high pressure process and/or with a solvent, e.g. alcohol, and separated from the remaining flesh extract containing protein. The resultant high-protein extract is used as a valuable constituent for making animal feed. The mussel oil recovered carefully, especially without heating, is also used as a valuable constituent or supplement for making animal feed, in amounts suited to the animals concerned. The amounts of extract and/or oil used in the feed depend on the species or breed of the animal and its biological condition, e.g. young, old, convalescing, hard-working etc.

Preferred Formulations: Animal feed formulations, especially for **dogs** and **cats**, contain up to 40% calf bone meal, up to 20% silica, up to 10% sunflower oil, up to 98% mussel oil from the green and blue mussels, up to 98% mussel protein and up to 98% blue mussel flesh or extract. Animal feed formulations, especially for horses, contain up to 40% oats, up to 20% barley, up to 20% silica, up to 10% maize, up to 98% mussel oil from the green and blue mussels, up to 98% mussel protein and up to 98% blue mussel flesh or extract. Both types of formulation may contain up to 98% grape seed flour or extract. Supplements: (claimed) The supplements for **dogs**, **cats** and horses contain up to 20% malt extract, up to 10% marine alga powder, up to 5% yeast, up to 5% horsetail, up to 2% methionine and 50-98% flesh and/or extract of *Perna Canaliculus*. The supplements for **cats** contain up to 98% flesh and/or extract of *Perna Canaliculus*.

TI Process for enhancing reproductivity performance in **pet** animals such as **dog** and **cat**, involves feeding animal with diet containing **omega-6** and **omega-3 fatty acids** in predetermined ratio.

DC D13

IN KELLEY, R L

PA (IAMS-N) IAMS CO

CYC 93

PI WO 2001037678 A1 20010531 (200137)\* EN 47 A23K001-16 <--  
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ  
 NL OA PT SD SE SL SZ TR TZ UG ZW  
 W: AE AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM EE  
 ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
 LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI  
 SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

AU 2001017947 A 20010604 (200153) A23K001-16 <--

BR 2000015849 A 20020716 (200255) A23K001-16 <--

EP 1233679 A1 20020828 (200264) EN A23K001-16 <--  
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
 RO SE SI TR

JP 2003514558 W 20030422 (200336) 50 A23K001-18 <--

CN 1409606 A 20030409 (200345) A23K001-16 <--

MX 2002005220 A1 20030101 (200373) A23K001-16 <--

NZ 519081 A 20031031 (200380) A23K001-16 <--

ZA 2002004080 A 20031029 (200381) 57 A23K000-00

US 6737078 B1 20040518 (200433) A23K001-18 <--

EP 1233679 B1 20040616 (200439) EN A23K001-16 <--  
 R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DE 60011667 E 20040722 (200450) A23K001-16 <--

ADT WO 2001037678 A1 WO 2000-US32178 20001122; AU 2001017947 A AU 2001-17947  
 20001122; BR 2000015849 A BR 2000-15849 20001122, WO 2000-US32178  
 20001122; EP 1233679 A1 EP 2000-980724 20001122, WO 2000-US32178 20001122;  
 JP 2003514558 W WO 2000-US32178 20001122, JP 2001-539307 20001122; CN  
 1409606 A CN 2000-817014 20001122; MX 2002005220 A1 WO 2000-US32178  
 20001122, MX 2002-5220 20020524; NZ 519081 A NZ 2000-519081 20001122, WO  
 2000-US32178 20001122; ZA 2002004080 A ZA 2002-4080 20020522; US 6737078  
 B1 Provisional US 1999-167282P 19991124, US 2000-718846 20001122; EP  
 1233679 B1 EP 2000-980724 20001122, WO 2000-US32178 20001122; DE 60011667  
 E DE 2000-00011667 20001122, EP 2000-980724 20001122, WO 2000-US32178  
 20001122

FDT AU 2001017947 A Based on WO 2001037678; BR 2000015849 A Based on WO  
 2001037678; EP 1233679 A1 Based on WO 2001037678; JP 2003514558 W Based on  
 WO 2001037678; MX 2002005220 A1 Based on WO 2001037678; NZ 519081 A Based  
 on WO 2001037678; EP 1233679 B1 Based on WO 2001037678; DE 60011667 E  
 Based on EP 1233679, Based on WO 2001037678

PRAI US 1999-167282P 19991124; US 2000-718846 20001122

IC ICM A23K000-00; A23K001-16; A23K001-18  
 ICS A01K067-00; A01K067-02; A23K001-165; A61D019-00

AB WO 2001037678 A UPAB: 20021031  
 NOVELTY - A process for enhancing reproductivity performance in a **pet** animal, involves feeding the animal with a diet containing **omega-6** and **omega-3 fatty acids**.  
 The ratio of **omega-6 fatty acids** to **omega-3 fatty acids** is 3.5:1-12.5:1.  
 DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for maintaining maternal essential **fatty acid** status in **pet** animals which involves feeding the animal with preset ratio of **omega-6** and **omega-3 fatty acids**.  
 USE - For enhancing **cats** and **dogs** reproductive performance for decreasing still births (claimed).  
 ADVANTAGE - The animals fed with the diet containing **omega-6** and **omega-3 fatty acids** maintained a better essential **fatty acids** status thereby declined

in reproductive performance is attenuated in subsequent parities. The animals fed also demonstrated improved reproductive performance with increased number of live births and increased number of neonates at weaning. The **dogs** maintained on the diet found to have increased litter size and reduced number of misconceptions as compared with commercial diets.

Dwg.0/19

FS CPI

FA AB

MC CPI: D03-G01

TECH UPTX: 20010704

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Amount: At least 50% of the total **fatty acids** in the diet are omega-6 **fatty acids** and 2% of the total **fatty acids** are **omega-3 fatty acids**.

Preferred Composition: The diet comprises 2.5-7.5 weight% of omega-6 **fatty acids** and 0.3-1.5 wt.% of **omega-3 fatty acids**. The ratio of omega-6 to **omega-3 fatty acids** is

5:1-10:1, preferably 5:1-8:1. The diet further comprises 22-44 wt.% of protein and 10-30 wt.% of fat for **dogs**, and 25-35 wt.% of protein and 15-25 wt.% of fat for **cats**. The animal is fed throughout reproductivity process.

ABEX UPTX: 20010704

EXAMPLE - The dietary effect of the **dogs** maternal essential **fatty acids** (EFA) status and reproduction in **cats** was evaluated by comparing with a commercial diet. The test diet composition (A) contained 36% of protein and 23% of fat. Diet A was formulated to contain 4.2% of omega-6 and 0.6% of **omega-3 fatty acids** in a weight ratio of 7.3:1. A comparative diet (B) contained 4.3 weight% of omega-6 and 0.26 weight% **omega-3 fatty acids** in a weight ratio of 16.3:1. The **cats** were fed with common maintenance diet and divided in to two groups, sampled for whole blood, and transition onto their respective diets. The **cats** were allowed to consumed the test diet 45 days prior to insemination. Pregnancy was confirmed at 21 days (G21) post breeding. Blood samples were collected for EFA status determination at G49, parturition+2 days (P2), P14, P28, P56 and P84. The blood samples were processed and analyzed. The result showed that **cats** fed with diet A were found to have significantly higher (improved) EFA index rating when compared to **cats** fed with diet B. The improved maintenance of maternal EFA status by diet A was more impressive and the **cats** also demonstrated superior reproductive performance and able to recover from nutrient demands of reproduction due to increased EFA index rate.

L84 ANSWER 12 OF 14 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 2000-292965 [25] WPIX

CR 2001-388872 [41]; 2002-255591 [30]

DNC C2000-088502

TI Artificially produced **canine** milk substitute composition for nursing **puppies** and critical care **canines**, includes a predefined amount of protein, fat, and carbohydrates.

DC D13

IN LEPINE, A

PA (IAMS-N) IAMS CO

CYC 88

PI WO 2000018247 A1 20000406 (200025)\* EN 23 A23C011-04

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL  
OA PT SD SE SL SZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES  
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS  
LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ

TM TR TT UA UG UZ VN YU ZA ZW

AU 9960283 A 20000417 (200035)

EP 1130974 A1 20010912 (200155) EN A23C011-04

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
RO SE SI

JP 2002525087 W 20020813 (200267) 26 A23K001-16 <--

MX 2001002440 A1 20011001 (200274) A23C011-04

AU 753725 B 20021024 (200277) A23C011-04

NZ 509776 A 20030725 (200357) A23C011-04

RU 2218812 C2 20031220 (200413) A23K001-18 <--

MX 219056 B 20040209 (200474) A23C011-04

ADT WO 2000018247 A1 WO 1999-US20469 19990907; AU 9960283 A AU 1999-60283 19990907; EP 1130974 A1 EP 1999-969649 19990907, WO 1999-US20469 19990907; JP 2002525087 W WO 1999-US20469 19990907, JP 2000-571773 19990907; MX 2001002440 A1 MX 2001-2440 20010308; AU 753725 B AU 1999-60283 19990907; NZ 509776 A NZ 1999-509776 19990907, WO 1999-US20469 19990907; RU 2218812 C2 WO 1999-US20469 19990907, RU 2001-104337 19990907; MX 219056 B WO 1999-US20469 19990907, MX 2001-2440 20010308

FDT AU 9960283 A Based on WO 2000018247; EP 1130974 A1 Based on WO 2000018247; JP 2002525087 W Based on WO 2000018247; AU 753725 B Previous Publ. AU 9960283, Based on WO 2000018247; NZ 509776 A Based on WO 2000018247; RU 2218812 C2 Based on WO 2000018247; MX 219056 B Based on WO 2000018247

PRAI US 1998-163778 19980930

IC ICM A23C011-04; **A23K001-16; A23K001-18**  
ICS A23C011-00; A23C021-00

AB WO 200018247 A UPAB: 20041117

NOVELTY - Artificially produced **canine** milk substitute composition comprises, on dry basis, 35-45% protein, 25-35% fat, and 10-25% carbohydrates.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for providing nutrition to a critical care **canine**, which comprises administering an amount of the invented artificially produced **canine** milk substitute composition.

USE - For nursing puppies and critical care **canines**.

ADVANTAGE - The milk substitute is based more closely on the actual concentrations of essential nutrients in bitch milk and supplies the nutritional needs of nursing puppies. The milk replacer provides improved fatty acid and amino acid profiles over currently available bitch milk replacers, and a high quality, highly digestable nutrient source for critical care **canines**.

Dwg.0/3

FS CPI

FA AB

MC CPI: D03-B11; **D03-G**

TECH UPTX: 20000524

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Composition: The protein source comprises casein and whey in a weight ratio of 70:30. The composition preferably comprises 38% protein, 28% fat, and 19% carbohydrates. It further contains 4-8 wt.% lactose, 0.5 wt.% fructooligosaccharide, 27-37 wt.% **fatty acids**, and/or 15-25 wt.% essential amino acids. The **fatty acids** comprise 15-19% palmitic acid, 5-9% stearic acid, 34-38% oleic acid, 17-21% linoleic acid, 1-4% alpha-linolenic acid, 0.5-2% arachidonic acid, 0.2-1% docosahexaenoic acid (DHA), 2-5% **Omega 3 fatty acids**, 18-22% **Omega 6 fatty acids**, and 1-4% trans **fatty acids**. The composition may also comprise amino acids containing 6-10% arginine, 4-8% histidine, 8-12% isoleucine, 16-20% leucine, 13-17% lysine, 2-7% methionine, 6-10% phenylalanine, 8-12% threonine, 1-4% tryptophan, 9-13% valine, 2-5% cystine, and 2-6% tyrosine.

ABEX UPTX: 20000524

EXAMPLE - A milk substitute was prepared by combining 80% water, 5.233% caseinate, 3.491% whey protein concentrate, 2.646% maltodextrin, 2.412%

butter oil, 1.764% canola oil, 1.147% mineral primex, 1.134 lactose, 0.869% corn oil, 0.506% dried egg yolk, 0.2% emulsifier, 0.128% vitamin premix2, 0.1% arachidonic acid supplement, 0.1% fructooligosaccharide, 0.09% l-histidine hydrochloric acid, 0.06% l-arginine, 0.055% choline chloride, 0.04% DHA supplement, and 0.025% ascorbic acid. The formulation (A) were tested in comparison with commercially bitch milk replacer Justborn (JBD), Esbilac (ESB) and the natural bitch milk was used as baseline value (100). The values of protein, fat and carbohydrates were gathered. Formula A had 96.6, 95, and 103.9; ESB had 83.1, 132.6 and 69.3; and JBD had 74.4, 107 and 114.4. Formula A was much closer to natural bitch milk than the other products.

L84 ANSWER 13 OF 14 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
 AN 1994-242394 [30] WPIX  
 DNC C1994-110688  
 TI Dietary compsn. for treating dermatosis in **dogs** and **cats**  
 - contains a poly-unsatd. fatty acid, an antiflatulent and biotin.  
 DC B05 C03 D13  
 IN MATSUURA, I; SAITO, T; SHIMADA, K  
 PA (KYOW) KYOWA HAKKO KOGYO KK  
 CYC 7  
 PI EP 609056 A2 19940803 (199430)\* EN 10 A23K001-16 <--  
 R: DE FR GB NL  
 CA 2114338 A 19940728 (199436) A61K035-00  
 JP 06217710 A 19940809 (199436) 8 A23K001-18 <--  
 EP 609056 A3 19950322 (199543) A23K001-16 <--  
 US 5756088 A 19980526 (199828) A01N063-02  
 EP 609056 B1 19991215 (200003) EN A23K001-16 <--  
 R: DE FR GB NL  
 DE 69422066 E 20000120 (200011) A23K001-16 <--  
 JP 3347381 B2 20021120 (200282) 8 A23K001-18 <--  
 CA 2114338 C 20040824 (200457) EN A61K035-74  
 ADT EP 609056 A2 EP 1994-300551 19940126; CA 2114338 A CA 1994-2114338  
 19940127; JP 06217710 A JP 1993-11984 19930127; EP 609056 A3 EP  
 1994-300551 19940126; US 5756088 A Cont of US 1994-186549 19940126, US  
 1995-532389 19950922; EP 609056 B1 EP 1994-300551 19940126; DE 69422066 E  
 DE 1994-622066 19940126, EP 1994-300551 19940126; JP 3347381 B2 JP  
 1993-11984 19930127; CA 2114338 C CA 1994-2114338 19940127  
 FDT DE 69422066 E Based on EP 609056; JP 3347381 B2 Previous Publ. JP 06217710  
 PRAI JP 1993-11984 19930127  
 REP No-SR.Pub; 4.Jnl.Ref; EP 241097; FR 2508282; GB 1503094; JP 04290820; JP  
 51118827  
 IC ICM A01N063-02; **A23K001-16; A23K001-18; A61K035-00;**  
 A61K035-74  
 ICS A61K031-20; A61K031-40; A61K031-41  
 AB EP 609056 A UPAB: 19940914  
 A dietary compsn. for **pets** comprising an antiflatulent, a  
**polyunsatd. fatty acid** and biotin is new. The  
 compsn. contains the antiflatulent at 0.00001-10%, the **polyunsatd**  
 . **fatty acid** at 0.5-50% and biotin at 0.01-1.0%.  
 USE/ADVANTAGE - The compsn. is useful for the treatment of dermatosis  
 in **pets**, especially **dogs** and **cats**. Dermatosis is  
 caused by a deficiency of essential **fatty acids** and  
 biotin, but dietary supplementation is usually not satisfactory on its  
 own. Conventional treatment of dermatosis used antibacterial agents and  
 steroids which on long term use can lead to side effects (e.g. secondary  
 adrenal cortical hypofunction, gastrointestinal disorders, nephrotoxicity  
 and chill). Dosage is 0.5-20g per day for animals over 15 kg.  
 Dwg.0/0  
 FS CPI  
 FA AB; DCN  
 MC CPI: B04-F10; C04-F10; B04-F10B1; C04-F10B1; B06-F03; C06-F03; B10-C04E;  
 C10-C04E; B14-N17C; C14-N17C; B14-S12; C14-S12; C06-F03; C10-C04;

C14-E03; C14-N17; D03-G

L84 ANSWER 14 OF 14 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
 AN 1980-48089C [27] WPIX  
 TI Coat conditioning compsn. for **cats** and **dogs** -  
 comprises safflower oil, oil of cloves and opt. cod liver oil and  
 vitamin(s).  
 DC C03 D13  
 PA (FRAS-I) FRASER C E O  
 CYC 1  
 PI US 4208429 A 19800617 (198027)\*  
 PRAI US 1974-529021 19741203; US 1975-572082 19750428  
 IC A61K031-23  
 AB US 4208429 A UPAB: 19930902  
 The condition of a **dog's** or **cat's** coat, which is poor  
 because of lack of dietary elements or because of excessive drying, is  
 improved by feeding the animal safflower oil(I) containing oil of cloves (II)  
 to improve palatability.  
 Opt. cod liver oil (III) is also added to further improve  
 palatability and provide a source of non-vegetable **fatty**  
**acid**. The compsn. can also contain oil-soluble vitamins A, D2 and  
 E. Pref. (I) is  $\geq 87\%$  of the compsn. and (III)  $<11\%$ .  
 Safflower oil is relatively bland and more acceptable than linseed  
 oil without inducing occasional vomiting. It is also ricker in  
**polyunsatd. fatty acids**. The compsn. makes  
 the coat soft, less brittle and glossier, controls shedding and improves  
 appetite. It proved acceptable to  $\geq 96\%$  of **cats** and  
**dogs**.  
 FS CPI  
 FA AB  
 MC CPI: C04-B01C; C12-L09; D03-G01

=> => fil frosti  
 FILE 'FROSTI' ENTERED AT 17:14:28 ON 15 DEC 2004  
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 FILE COVERS 1972 TO DATE.

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 IN THE BASIC INDEX (/BI) FIELD <<<

=> d all tot

L103 ANSWER 1 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 650144 FROSTI  
 TI Fatty acid composition in commercial **dog foods**.  
 AU Ahlstrom O.; Krogdahl A.; Vhile S.G.; Skrede A.  
 SO Journal of Nutrition, 2004, (August), 134 (S8), 2145S-2147S (9 ref.)  
 Published by: <http://www.nutrition.org>  
 ISSN: 0022-3166  
 NTE Paper presented at the Waltham International Science Symposium 'Nature,  
 Nurture, and the Case for Nutrition', Bangkok, Thailand,  
 DT Conference Article  
 LA English  
 AB Factors influencing choice of fat sources for dried extruded **dog**  
**food** are essential **fatty acid** (EFA) content,  
 melting point of fat, degree of saturation, palatability, susceptibility  
 to oxidation, and cost. This study investigated the **fatty**  
**acid** profiles of 12 brands of dry **dog food**

(including puppy foods) available in Norway. Substantial differences were observed in **fatty acid** composition and EFA content. The authors suggest that differences in n-6 and n-3 EFA levels may explain some differences in biological responses observed by **dog** owners.

SH CONVENIENCE FOODS  
 CT COMPOSITIONAL PROFILES; DOG FOODS; DRY DOG FOODS; DRY PET FOODS; ESSENTIAL FATTY ACIDS; EXTRUDED PET FOODS; FATTY ACID PROFILES; FATTY ACIDS; LIPIDS; NUTRITIONAL VALUE; PET FOODS  
 DED 8 Oct 2004

L103 ANSWER 2 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 649667 FROSTI  
 TI Oral **omega-3 fatty acid** nutritional supplement for companion animals.  
 IN MacKinnon W.  
 SO PCT Patent Application  
 PI WO 2004075653 A1  
 AI 20040205  
 PRAI Canada 20030228  
 DT Patent  
 LA English  
 SL English  
 AB A powdered or microencapsulated nutritional additive rich in **omega-3 fatty acids** is described for use as top dressing or the supplementation of **pet foods**. The invention can be derived from fish oil and/or seal oil and can increase serum levels of eicosapentaenoic acid and docosahexaenoic acid in companion animals such as **dogs** and **cats**. It is claimed to prevent or treat renal, dermatological, and cardiovascular diseases as well as conditions associated with inflammation in the animals. The **fatty acids** play an important role in physiological functions such as neurological development and membrane-mediated functions. The invention is convenient to use in relatively small quantities, retaining freshness and avoiding off or tainted tastes.  
 CT ANIMAL DISEASES; CONVENIENCE FOODS; DIETARY SUPPLEMENTS; DIETETIC FOODS; DOCOSAHEXAENOIC ACID; EICOSAPENTAENOIC ACID; ENCAPSULATION; **FATTY ACIDS**; FUNCTIONAL PET FOODS; LIPIDS; MICROENCAPSULATION; **OMEGA 3 FATTY ACIDS**; PATENT; PCT PATENT; PET FOOD ADDITIVES; PET FOOD SUPPLEMENTS; POLYUNSATURATED FATTY ACIDS  
 DED 30 Sep 2004

L103 ANSWER 3 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 645842 FROSTI  
 TI Pet foods plus.  
 AU Miraglio A.M.  
 SO Food Product Design, 2003, (November), supplement 'Functional Foods Annual', 33-36+38-39 (0 ref.)  
 Published by: <http://www.foodproductdesign.com>  
 ISSN: 1065-772X  
 DT Journal  
 LA English  
 AB This article discusses a number of issues currently affecting the market for **pet foods**, currently valued at around USD 10 billion in the US. These include the formulation of **pet food** using natural ingredients without chemical preservatives, organic **pet foods**, the raw diet, and the health issues facing **dogs** and **cats** (obesity, arthritis, allergies, the omega-6 to **omega-3 fatty acid** ratio, enhanced immunity in later years, etc.) and the foods

developed to address them. These include: low-calorie and high-fibre foods: foods supplemented with L-carnitine, glucosamine, chondroitin, omega-6 and **omega-3 fatty acids** (from fish oil or flaxseed), hexametaphosphate, antioxidants (beta-carotene, vitamins, lutein, tocopherol, rosemary extract, etc.) and selenium; and non-allergenic foods containing non-meat or low-molecular weight proteins.

SH CONVENIENCE FOODS  
 CT FUNCTIONAL INGREDIENTS; INGREDIENTS; PET FOODS  
 DED 17 Aug 2004

L103 ANSWER 4 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 640858 FROSTI  
 TI Process for enhancing **canine** and **feline** reproductive performance.  
 IN Kelley R.L.  
 PA Iams Co.  
 SO United States Patent  
 PI US 6737078 B 20040518  
 AI 20001122  
 NTE 20040518  
 DT Patent  
 LA English  
 SL English  
 AB A **pet food** containing **essential fatty acids** is described to help improve the reproductive performance of a companion animal such as a **dog** or a **cat**. The **pet food** contains a preferred ration of omega 6 and **omega 3 fatty acids**. The invention is based on the discovery that maintaining a better **essential fatty acid** status in a companion **pet** improves the reproductive performance of the **pet**, resulting in more live births, among other benefits.

CT CAT FOODS; DOG FOODS; FUNCTIONAL PET FOODS; PATENT; PET FOODS; REPRODUCTIVE PERFORMANCE; US PATENT  
 DED 17 Jun 2004

L103 ANSWER 5 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 640085 FROSTI  
 TI **Canine** cardiac diet.  
 IN Freeman L.M.; Rush J.E.  
 PA Mars Inc.  
 SO European Patent Application  
 PI EP 1414386 A2  
 WO 2003015695 20030227  
 AI 20020809  
 PRAI United States 20010810  
 DT Patent  
 LA English  
 SL English  
 AB The invention relates to a foodstuff for use in controlling cardiovascular disorders relating to or affecting the heart as well as the systemic and the pulmonary circulation of **pet** animals such as **dogs** and **cats**. The foodstuff, which comprises **taurine**, **vitamin C**, **vitamin E** and **polyunsaturated fatty acids**, provides various nutritional and therapeutic benefits in terms of cardiovascular health of a **dog**. The foodstuff can be used in combination with one or more conventional therapy to reduce the progression of cardiovascular disease. The foodstuff can also be administered to **dogs** with early, moderate or late stage cardiovascular disease. The invention is suitable for use as a mixture of wet and dry food and encompasses any product that an animal consumes

in its diet.

CT ADDITIVES; ANIMAL DISEASES; ANIMAL HEALTH; CARDIOVASCULAR DISEASES; CAT FOODS; CATS; DIETARY SUPPLEMENTS; DIETETIC FOODS; DISEASES; DOG FOODS; EUROPEAN PATENT; FATTY ACIDS; LIPIDS; ORGANIC ACIDS; PATENT; PET FOODS; PETS; POLYUNSATURATED FATTY ACIDS; UNSATURATED FATTY ACIDS; VITAMIN SUPPLEMENTS; VITAMINS

DED 8 Jun 2004

L103 ANSWER 6 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 637272 FROSTI  
 TI Orally administrable composition for improving hair and coat quality.  
 IN Pridmore-Merten S.; Lurati E.; Pourzand-Azarmehr F.; Rossio P.; Demarchez M.  
 PA Nestec SA  
 SO PCT Patent Application  
 PI WO 2004024108 A1  
 AI 20030901  
 PRAI European Patent Office 20020909  
 DT Patent  
 LA English  
 SL English  
 AB A novel composition consisting of a molecule that stimulates energy metabolism of a cell and an antioxidant is disclosed. The composition can be a complete and nutritionally balanced food for humans or animals. It may be in the form of a nutritional complete formula, a dairy product, a chilled or shelf-stable beverage, soup, a meal replacement, and a nutritional bar or a confectionery. The composition may also be a dietary supplement, a pharmaceutical or veterinary formulation. The nutritionally complete pet formulation may be a powder, a dried kibble, or pellet or other dried form, extruded form, semi-moist or wet form such as a chunk, loaf or pudding. The composition can utilise L-carnitine, creatine, **fatty acids** (particularly **omega-3 fatty acids**), cardiolipin, nicotinamide or carbohydrate as the molecular component.  
 SH FUNCTIONAL FOODS  
 CT AMINES; AMINO ACIDS; ANTIOXIDANTS; BIOGENIC AMINES; CARBOHYDRATES; CARDIOLIPIN; CARNITINE; CREATINE; DIETARY ADDITIVES; DIETARY SUPPLEMENTS; DIETETIC FOODS; **FATTY ACIDS**; FUNCTIONAL FOODS; FUNCTIONAL INGREDIENTS; FUNCTIONAL PET FOODS; INGREDIENTS; LIPIDS; NICOTINAMIDE; **OMEGA 3 FATTY ACIDS**; PATENT; PCT PATENT; PET FOODS; POLYUNSATURATED FATTY ACIDS; VITAMINS  
 DED 6 May 2004

L103 ANSWER 7 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 624673 FROSTI  
 TI Dietary methods for **canine** performance enhancement.  
 IN Davenport G.M.; Kelly R.L.; Altom E.K.; Lepine A.J.  
 PA Iams Co.  
 SO PCT Patent Application  
 PI WO 2003086100 A1  
 AI 20030414  
 PRAI United States 20020412  
 DT Patent  
 LA English  
 SL English  
 AB Improved dietary methods for sport and task animals such as hunting and search **dogs** are disclosed. The methods claim to orally administer an effective amount of a diet consisting of eicosapentaenoic acid, docosahexaenoic acid or both to improve the physical and cognitive performance of the animals. They improve diet metabolism, olfactory perception, responsiveness to Pavlovian conditioning, and target

detection of prey animals or search objects. The methods increase the hunt or search performance and the heat endurance of the animals. They are also claimed to increase the energy level of animals to provide an increased feeling of well-being, alertness, and lower body temperature during periods of high physical activity and caloric expenditure. The invention is particularly suitable for an English Pointer **dog**.

CT DIETARY SUPPLEMENTS; DIETETIC FOODS; DOCOSAHEXAENOIC ACID; EICOSAPENTAENOIC ACID; **FATTY ACIDS**; LIPIDS; **OMEGA 3 FATTY ACIDS**; PATENT; PCT PATENT; **PET FOOD ADDITIVES**; **PET FOOD SUPPLEMENTS**; **PET FOODS**; **POLYUNSATURATED FATTY ACIDS**; SPORTS ANIMALS

DED 9 Dec 2003

L103 ANSWER 8 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 618972 FROSTI  
 TI Oil including **omega-3 fatty acids** with therapeutic properties.  
 IN Gasso Casademunt F.  
 PA Proyecto Empresarial Brudy SL  
 SO PCT Patent Application  
 PI WO 2003063610 A1  
 AI 20030121  
 PRAI Spain 20020129  
 DT Patent  
 LA English  
 SL English  
 AB A novel oil product consisting of at least one **omega-3 fatty acid** as a substitute of an antibiotic for non-human animal consumption is disclosed. The oil product acts as an antibacterial agent, a growth stimulant agent, and an anticoccidiostatic agent when added to the animal feed. The invention claims to maintain the optimum state of health of the animals, in addition to optimizing their growth and production of meat and eggs. It is said to achieve a high-quality meat product, while avoiding the characteristic residues produced when drugs are used. The invention also reinforces the immune system so that it is not specific to a particular infectious agent and the development of resistance is hindered. The invention is suitable for industrial fattening or production of animals such as lambs and for **pet animals**.

CT ANTIBACTERIALS; ANTIMICROBIALS; CONVENIENCE FOODS; **FATTY ACIDS**; FEED ADDITIVES; FEED SUPPLEMENTS; FEEDS; LIPIDS; **OMEGA 3 FATTY ACIDS**; PATENT; PCT PATENT; **PET FOOD ADDITIVES**; **PET FOOD SUPPLEMENTS**; **PET FOODS**; **POLYUNSATURATED FATTY ACIDS**

DED 23 Sep 2003

L103 ANSWER 9 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 618803 FROSTI  
 TI Healthy trends in **pet nutrition**.  
 AU Anon.  
 SO Nutraceuticals World, 2003, (March), 6 (3), 68-72 (4pp), (0 ref.)  
 Published by: Rodman Publishing Corporation. Address: 70 Hilltop Road, Ramsey, NJ 07446, USA. Telephone: +1 (201) 825 2552. Fax: +1 (201) 825 0553. Web: [www.nutraceuticalsworld.com](http://www.nutraceuticalsworld.com)  
 ISSN: 1531-0671  
 DT Journal  
 LA English  
 SL English  
 AB Healthy trends in **pet nutrition** are discussed with respect to joint therapy, skin and coat, and obesity. A combination of glucosamine and chondroitin is used to relieve pain and inflammation in the joints, as is green lipped mussel. **Omega-3 fatty acids** improve the health of the skin and coat.

Calorie-restricted diets may contain defatted jojoba meal, L-carnitine and chromium to decrease intake and body fat, whilst enhancing lean body mass and energy expenditure.

SH CONVENIENCE FOODS  
 CT AMINES; AMINO NITROGEN COMPOUNDS; AMINO SUGARS; ANIMAL DIETS; ANIMAL JOINTS; BIOGENIC AMINES; CARNITINE; CHONDROITIN; CHROMIUM; DEFATTED JOJOBA MEAL; **FATTY ACIDS**; FUNCTIONAL PET FOODS; GLUCOSAMINE; GREEN LIPPED MUSSEL; LIPIDS; OBESITY; OMEGA 3 FATTY ACIDS; PET COATS; PET FOODS; PET SKIN; PETS; POLYUNSATURATED FATTY ACIDS; SUGARS; TRACE ELEMENTS

DED 23 Sep 2003

L103 ANSWER 10 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 614026 FROSTI  
 TI Safe and effective?  
 AU Dzanis D.  
 SO Petfood Industry, 2003, (May), 45 (5), 11-16 (4pp) (1 ref.)  
 Published by: Petfood Industry, Watt Publishing Co. Address: 122 S. Wesley Ave., Mt. Morris, IL 61054-1497, USA. Telephone: +1 (815) 734 4171. Fax: +1 (815) 734 9091. Web: www.wattnet.com  
 ISSN: 0031-6245  
 DT Journal  
 LA English  
 AB The inclusion of novel ingredients in **pet foods** and supplements has become increasingly popular. Substances allowed for human consumption might still be unapproved food additives when used in animal feeds. The safety and efficacy of these novel ingredients are discussed in relation to studies in **cats** and **dogs**. Various combinations of antioxidants fed to **dogs** and/or **cats** have been reported to improve serum vitamin E status, suppress lipid peroxidation, normalize the adverse effects of exercise on the immune system, improve the length of response to vaccination and improve cognitive function. The use and safety of antioxidants, chondroprotective agents, **omega-3 fatty acids**, prebiotics, probiotics and enzymes, and herbs and botanicals are discussed. Chromium, carnitine and brewers' yeast are also considered. Vitamin E is essential in the diets of **cats** and **dogs** for its antioxidant properties. A role for vitamin C supplementation of stressed working **dogs** has been proposed. High levels of vitamin E intake might interfere with absorption of other fat-soluble vitamins. Beneficial effects of glucosamine and chondroitin sulfate for osteoarthritis, **omega-3 fatty acids** and immune response, and prebiotic fibres such as inulin and fructooligosaccharides are considered, together with toxicosis in **dogs** following consumption of human dietary supplements containing stimulants.

SH CONVENIENCE FOODS  
 CT AMINO NITROGEN COMPOUNDS; AMINO SUGARS; ANTIOXIDANTS; BT HERBAL DRUGS; CHONDROITIN SULFATE; EFFICIENCY; ENZYMES; ESSENCES; EXTRACTS; **FATTY ACIDS**; FOOD SAFETY; GLUCOSAMINE; HERB EXTRACTS; NOVEL INGREDIENTS; **OMEGA 3 FATTY ACIDS**; ORGANIC ACIDS; PET FOODS; PLANT EXTRACTS; **POLYUNSATURATED FATTY ACIDS**; PREBIOTICS; PROBIOTICS; SAFETY; SUGARS

DED 15 Jul 2003

L103 ANSWER 11 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 607415 FROSTI  
 TI Canine cardiac diet.  
 IN Freeman L.M.; Rush J.E.  
 PA Mars Inc.  
 SO PCT Patent Application  
 PI WO 2003015695 A2

AI 20020809  
 PRAI United States 20010810  
 DT Patent  
 LA English  
 SL English  
 AB The invention relates to a foodstuff for use in controlling cardiovascular disorders relating to or affecting the heart as well as the systemic and the pulmonary circulation of **pet** animals such as **dogs** and **cats**. The foodstuff, which comprises taurine, vitamin C, vitamin E and **polyunsaturated fatty acids**, provides various nutritional and therapeutic benefits in terms of cardiovascular health of a **dog**. The foodstuff can be used in combination with one or more conventional therapy to reduce the progression of cardiovascular disease. The foodstuff can also be administered to **dogs** with early, moderate or late stage cardiovascular disease. The invention is suitable for use as a mixture of wet and dry food and encompasses any product that an animal consumes in its diet.

CT ANIMAL DISEASES; ANIMAL HEALTH; CARDIOVASCULAR DISEASES; **CAT FOODS; CATS; DOG FOODS; FATTY ACIDS; LIPIDS; PATENT; PCT PATENT; PET FOOD ADDITIVES; PET FOODS; POLYUNSATURATED FATTY ACIDS; UNSATURATED FATTY ACIDS; VITAMIN SUPPLEMENTS; VITAMINS**

DED 10 Apr 2003

L103 ANSWER 12 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 604705 FROSTI

TI **Pet food** composition for reducing inflammatory response in **cats**.

IN Hayek M.G.; Reinhart G.A.

PA Iams Co.

SO European Patent Application

PI EP 1280416 A1  
 WO 2001082720 20011108

AI 20010430

PRAI United States 20000501

DT Patent

LA English

SL English

AB A **pet food** composition that can reduce the inflammatory response in **cats**, without any side effects, is described. The composition contains **omega-3 (n-3) fatty acids**, especially alpha-linolenic acid. Flaxseed oil is the preferred source of alpha-linolenic acid. The inflammatory response can cause significant health problems, such as inflammatory bowel disease, arthritis and dermatitis.

CT ANTIINFLAMMATORIES; **CAT FOODS; EUROPEAN PATENT; FATTY ACIDS; FUNCTIONAL PET FOODS; LINOLEIC ACID; LIPIDS; OMEGA 3 FATTY ACIDS; OMEGA 6 FATTY ACIDS; ORGANIC ACIDS; PATENT; PET FOODS; POLYUNSATURATED FATTY ACIDS; UNSATURATED FATTY ACIDS**

DED 7 Mar 2003

L103 ANSWER 13 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN

AN 599206 FROSTI

TI Method for improving bone modeling and chondrocyte functioning in growing **canines**.

IN Watkins B.A.; Lepine A.J.; Hayek M.G.; Reinhart G.A.

PA Iams Co.

SO European Patent Application

PI EP 1255546 A1  
 AI 20010216  
 PRAI United States 20000217  
 DT Patent  
 LA English  
 SL English  
 AB A **dog food** fortified with appropriate amounts of dietary n-6 and n-3 **fatty acids** for healthier and faster growing bones is disclosed. The invention specifically stimulates bone development and chondrocyte functioning in growing **canines**. The amount of n-3 **fatty acids** in the **pet food** and the ratio of n-6 to n-3 **fatty acids** are important in promoting synthesis and tissue accumulation of down-regulating elements of inflammation. Preferably, the n-3 **fatty acids** consist of eicosapentaenoic acid and docosahexaenoic acid. The composition may also contain crude protein, fat, dietary fibre, and carbohydrates, although there are no required ratios or percentages for these nutrients.  
 CT ACIDS; ADDITIVES; ANIMAL BONES; ANIMAL HEALTH; DIETARY ADDITIVES; DIETARY SUPPLEMENTS; DIETETIC FOODS; DOG FOODS; DOGS; EUROPEAN PATENT; FATTY ACIDS; FUNCTIONAL FOODS; FUNCTIONAL PET FOODS; GROWTH; GROWTH FACTORS; GROWTH PROMOTERS; HUMAN GROWTH; LIPIDS; OFFAL; ORGANIC ACIDS; PATENT; PET FOODS; PETS  
 DED 9 Jan 2003

L103 ANSWER 14 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 590926 FROSTI  
 TI Method for improving bone modeling and chondrocyte functioning in growing **canines**.  
 IN Watkins B.A.; Lepine A.J.; Hayek M.G.; Reinhart G.A.  
 PA Iams Co.  
 SO United States Patent  
 PI US 6426100 B 20020730  
 AI 20010216  
 NTE 20020730  
 DT Patent  
 LA English  
 SL English  
 AB A **dog food** fortified with appropriate amounts of dietary n-6 and n-3 **fatty acids** for healthier and faster growing bones is disclosed. The invention specifically stimulates bone development and chondrocyte functioning in growing **canines**. The amount of n-3 **fatty acids** in the **pet food** and the ratio of n-6 to n-3 **fatty acids** are important in promoting synthesis and tissue accumulation of down-regulating elements of inflammation. Preferably, the n-3 **fatty acids** consist of eicosapentaenoic acid and docosahexaenoic acid. The composition may also contain crude protein, fat, dietary fibre, and carbohydrates, although there are no required ratios or percentages for these nutrients.  
 CT ADDITIVES; ANIMAL BONES; ANIMAL HEALTH; DIETARY ADDITIVES; DIETARY SUPPLEMENTS; DIETETIC FOODS; DOG FOODS; DOGS; FATTY ACIDS; FUNCTIONAL FOODS; FUNCTIONAL PET FOODS; GROWTH; GROWTH FACTORS; GROWTH PROMOTERS; HUMAN GROWTH; LIPIDS; OFFAL; ORGANIC ACIDS; PATENT; PET FOODS; PETS; US PATENT  
 DED 10 Sep 2002

L103 ANSWER 15 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 588730 FROSTI  
 TI Pet nutraceuticals. Hype or wave of the future?  
 AU Brown L.P.

SO Nutraceuticals World, 2001, (January-February), 4 (1), 34-36+38-41 (13 ref.)  
 Published by: Rodman Publishing Corporation. Address: 70 Hilltop Road, Ramsey, NJ 07446, USA. Telephone: +1 (201) 825 2552. Fax: +1 (201) 825 0553. Web: www.nutraceuticalsworld.com  
 ISSN: 1531-0671

DT Journal  
 LA English  
 AB Consumer demands for functional foods and beverages have led to pet product companies producing speciality foods, treats, and therapeutic supplements for pets. This article considers trends in pet foods and supplements and how they have paralleled those in beverages, foods and supplements designed for humans. Pet product regulations in the US are discussed and requirements of new products are listed. Nutraceutical pet products are discussed with specific reference to the following categories of pet dietary supplements: supplemental glucosamine for joint health; antioxidant protection from free radical damage; use of omega-3 fatty acids in pet foods and supplements to reduce signs of allergies and skin inflammatory dysfunctions; and others including St John's wort, green food products, and probiotics. Fortified pet foods are also discussed. Finally, new pet nutraceuticals produced by Olympian Labs, Scottsdale, Arizona, are reviewed.

SH CONVENIENCE FOODS  
 CT DIETARY SUPPLEMENTS; DIETETIC FOODS; FORTIFIED FOODS; FUNCTIONAL FOODS; FUNCTIONAL PET FOODS; HEALTH BENEFITS; NEW PRODUCTS; PET FOODS; PETS; PROBIOTICS  
 DED 6 Aug 2002

L103 ANSWER 16 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 574622 FROSTI  
 TI Pet foods using algal or fungal waste containing fatty acids.  
 IN Criggall J.G.; Trivedi N.B.; Hutton J.P.  
 PA Applied Food Biotechnology Inc.  
 SO United States Patent  
 PI US 6338866 B 20010823  
 AI 20010215  
 NTE 20010823  
 DT Patent  
 LA English  
 SL English  
 AB Healthy and nutritious pet foods and pet food enhancers are useful for cats, dogs, ferrets and pot-bellied pigs. They are produced cost-effectively from residual docosahexaenoic acid-containing algal biomass waste products. The waste is mixed with brewers' yeast, a grain product such as wholewheat, and water to form a dough that is shaped and cooked. When used as a flavour enhancer, the algal biomass can be incorporated with other additives to coat pelleted or extruded chunks (kibbles).  
 CT ALGAE; ALGAL PRODUCTS; ALGAL WASTE; DIETARY SUPPLEMENTS; DIETETIC FOODS; DOCOSAHEXAENOIC ACID; FATTY ACIDS; LIPIDS; OMEGA 3 FATTY ACIDS; PATENT; PET BISCUITS; PET FOODS; POLYUNSATURATED FATTY ACIDS; US PATENT; WASTES  
 DED 8 Feb 2002

L103 ANSWER 17 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 570338 FROSTI  
 TI Pet food composition for reducing inflammatory response in cats.  
 IN Hayek M.G.; Reinhart G.A.  
 PA Iams Co.

SO PCT Patent Application  
 PI WO 2001082720 A1 20011108  
 AI 20010430  
 PRAI United States 20000501  
 NTE 20011108  
 DT Patent  
 LA English  
 SL English

AB A **pet food** composition that can reduce the inflammatory response in **cats**, without any side effects, is described. The composition contains **omega-3 (n-3) fatty acids**, especially alpha-linolenic acid. Flaxseed oil is the preferred source of alpha-linolenic acid. The inflammatory response can cause significant health problems, such as inflammatory bowel disease, arthritis and dermatitis.

CT ANTIINFLAMMATORIES; CAT FOODS; FATTY ACIDS;  
 FUNCTIONAL PET FOODS; LINOLEIC ACID; LIPIDS;  
 OMEGA 3 FATTY ACIDS; OMEGA 6 FATTY ACIDS;  
 PATENT; PCT PATENT; PET FOODS; POLYUNSATURATED FATTY ACIDS

DED 11 Dec 2001

L103 ANSWER 18 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN

AN 560946 FROSTI

TI Recent advantages in **pet** nutrition, Part 2.

AU Earle K.

SO Feed Tech, 2001, 5 (4), 42-44 (0 ref.)  
 Published by: Elsevier International Business Information Address: PO Box 4, 7000 BA Doetinchem, The Netherlands Telephone: +31 (314) 349562  
 Fax: +31 (314) 340515 Email: d.ziggers@ebi.nl  
 ISSN: 1387-1978

DT Journal

LA English

AB This second of two articles on developments in **pet** nutrition considers products for improving skin and coat health, dental health, and intestinal health, and for preventing signs of ageing. As well as nutrients required for optimum skin condition, bioavailability should be considered. There is current debate over identifying optimum levels of **omega-6** and **omega-3 fatty acids**.

Tooth loss and poor oral health are significant problems in older **cats** and **dogs**; findings are summarized from a feeding study of a functional dry **cat food**. Overweight and obesity are increasing in **dogs** in developed countries, with risk of chronic disease; supplementation has been investigated for accelerating weight loss. Prebiotics such as whole chicory root have been used for improving intestinal health in **dogs** and **cats**.

SH CONVENIENCE FOODS

CT AGE; CAT FOODS; CATS; DEVELOPMENT; DIETARY SUPPLEMENTS; DIETETIC FOODS; DOG FOODS; DOGS; DRY CAT FOODS; DRY PET FOODS; FUNCTIONAL SUPPLEMENTS; HEALTH; NUTRITIONAL STATUS; PET FOODS; PETS; PREBIOTICS

DED 17 Aug 2001

L103 ANSWER 19 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN

AN 554294 FROSTI

TI Conjugated linoleic acid for weight reduction in a **dog**.

IN Lowe J.

PA Gilbertson and Page Ltd

SO UK Patent Application

PI GB 2355382 A

AI 19990824  
 DT Patent  
 LA English  
 SL English  
 AB Conjugated linoleic acid (CLA) may be used for weight reduction in obese dogs. The composition may contain raw rice, fish and vegetable matter such as wheat, maize or soya, with dietary fibre, vitamins, minerals and trace elements. Extruded product may be coated in a duck-based digest. Moisture accounts for less than 6%; CLA, present as cis-9, trans-11 octadecadienoic acid, accounts for about 7 g/kg of composition. The composition should be given at a dose of 0.15 ml/kg in conjunction with exercise. The palatability of the composition ensures compliance from the dog, whilst the visible effects of the diet ensure owner compliance.

CT CONJUGATED FATTY ACIDS; CONJUGATED LINOLEIC ACID; DOG FOODS; FATTY ACIDS; FUNCTIONAL PET FOODS; LINOLEIC ACID; LIPIDS; OMEGA 6 FATTY ACIDS; ORGANIC ACIDS; PATENT; PET FOODS; POLYUNSATURATED FATTY ACIDS; UK PATENT

DED 6 Jun 2001

L103 ANSWER 20 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 538695 FROSTI  
 TI Omega fatty acids, pets and health.  
 AU Ziggers D.  
 SO Feed Tech, 2000, 4 (7), 36-37 (0 ref.)  
 Published by: Elsevier International Business Information Address: PO Box 4, 7000 BA Doetinchem, The Netherlands Telephone: +31 (314) 349562  
 Fax: +31 (314) 340515 Email: d.ziggers@ebi.nl  
 ISSN: 1387-1978

DT Journal  
 LA English  
 AB The role of essential fatty acids in the diet of cats and dogs, in particular omega-3 fatty acids found in flaxseed, is discussed. Essential fatty acids are good for treating skin disorders, such as allergic skin reactions to pollens or moulds. The author describes the role of fat in the human diet, and in the diets of cats and dogs, together with details of the fatty acids required by cats and dogs. He also describes the four main families of unsaturated fatty acids (data are tabulated), interconversion of omega-3 and omega-6 fatty acids, and flaxseed as a source of omega-3 fatty acids.

SH CONVENIENCE FOODS  
 CT BASIC GUIDE; CAT FOODS; DIET; DOG FOODS; ESSENTIAL FATTY ACIDS; FATTY ACIDS; FLAXSEED; LIPIDS; OILSEEDS; OMEGA 3 FATTY ACIDS; ORGANIC ACIDS; PET FOODS

DED 1 Dec 2000

L103 ANSWER 21 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 538128 FROSTI  
 TI Nutritional supplements for the pet with heart disease.  
 AU Kettenacker R.W.; Eves B.E.  
 SO Journal of the American Nutraceutical Association, 2000, (Summer), 3 (2), 61-64 (44 ref.)  
 Published by: American Nutraceutical Association Address: 22 Inverness Center Parkway, Suite 150, Birmingham, AL 35242, USA Telephone: +1 (205) 980 5710 Fax: +1 (205) 991 9302 Web: www.americanutra.com

DT Journal  
 LA English  
 AB Specific nutrients have been shown to be beneficial as adjuncts to

conventional drug therapies. The use of taurine supplements to prevent dilated cardiomyopathy in **cats** and **dogs** is described.

The association between L-carnitine deficiencies in the myocardium and cardiomyopathies in some **dog** breeds is discussed. The benefits of coenzyme Q10 (ubiquinone) supplementation, long-chain n-3 **polyunsaturated fatty acid**

supplementation, and magnesium supplementation in **cats** and **dogs** with heart disease are reviewed.

SH CONVENIENCE FOODS

CT CARDIOVASCULAR DISEASES; CARNITINE; COENZYME Q10; COENZYMES; DIETARY SUPPLEMENTS; DIETETIC FOODS; DISEASES; DRUGS; **FATTY ACIDS**; HEART DISEASE; L CARNITINE; LIPIDS; MAGNESIUM; OMEGA 3 **FATTY ACIDS**; PETS; **POLYUNSATURATED FATTY ACIDS**; TRACE ELEMENTS; VETERINARY DRUGS

DED 23 Nov 2000

L103 ANSWER 22 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN

AN 528832 FROSTI

TI Dietary compositions and method for promoting healthy weight loss **cats**.

IN Sunvold G.D.

PA Iams Co.

SO United States Patent

PI US 6071544 B 20000606

AI 19990401

NTE 20000606

DT Patent

LA English

SL English

AB From 10 to 40% of **cats** have been reported as overweight, making them more prone to a variety of diseases. This **cat food** provides a combination of **fatty acids** and proteins, which are claimed to promote weight loss, whilst minimizing the risk of diseases such as hepatic lipidosis. Preferably, the dry weight feed contains 28-50% protein, and 7-14% fat, of which 0.2-1.5% is made up of the **polyunsaturated fatty acids** C18:3, C20:4, C20:5, and C22:6. The feed has been shown to promote weight loss, reduce levels of free **fatty acids**, and increase those of HDL cholesterol.

CT **CAT FOODS; FATTY ACIDS; HEALTH PET FOODS; LIPIDS; PATENT; PET FOODS; POLYUNSATURATED FATTY ACIDS; SLIMMING PET FOODS; UNSATURATED FATTY ACIDS; US PATENT**

DED 4 Aug 2000

L103 ANSWER 23 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN

AN 491479 FROSTI

TI Is there a role for dietary **polyunsaturated fatty acid** supplementation in **canine** renal disease?

AU Brown S.A.; Finco D.R.; Brown C.A.

SO Journal of Nutrition, 1998, (December), 128 (12S), 2765S-2767S (25 ref.)  
ISSN: 0022-3166

NTE Waltham International Symposium on Pet Nutrition and Health in the 21st Century, 25-29 May 1997, Orlando, Florida.

DT Journal

LA English

SL English

AB Spontaneous renal diseases are a frequent cause of illness and death in **dogs**, especially in elderly **dogs**. **Dogs** with these diseases often develop progressive uraemia. However, the effects of dietary **polyunsaturated fatty acid** (PUFA) composition have been poorly characterized in **dogs** with chronic renal disease. The hypothesis that dietary PUFA supplementation may delay

the progression of chronic renal insufficiency in **dogs** was examined. Dietary supplementation with (n-3) PUFA prevented the deterioration of the glomerular filtration rate and preserved renal structure. This could alter renal haemodynamics and the long-term course of renal injury in **dogs**.

SH NUTRITION

CT DIET; DIETARY SUPPLEMENTATION; FATTY ACIDS;  
NUTRITION; POLYUNSATURATED FATTY ACIDS; RENAL DISEASE

DED 21 Apr 1999

L103 ANSWER 24 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN

AN 478444 FROSTI

TI Utilization of **omega-3 fatty acids**  
in companion animal nutrition.

AU Hayek M.G.; Reinhart G.A.

SO The return of omega-3 fatty acids into the food supply, volume 1:  
land-based animal food products and their health effects: proceedings of  
the international conference, Bethesda, September 1997., Published by:  
Karger, Basel, 1998, 176-185 (58 ref.)

Simopoulos A.P.

ISBN: 3-8055-6694-8

DT Conference Article

LA English

AB The authors observe that inflammatory dermatological conditions are common in **dogs** and **cats**; and that a balanced ratio of **omega-6:omega-3 fatty acids** is essential, and represents an effective therapy for these complaints in companion animals.

SH CONVENIENCE FOODS

CT ANIMAL DISEASES; CATS; DOGS; FATTY  
ACIDS; OMEGA 3 FATTY ACIDS; OMEGA 6 FATTY  
ACIDS; PETS; PREVENTION; VETERINARY TREATMENT

DED 28 Oct 1998

L103 ANSWER 25 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN

AN 398116 FROSTI

TI Pet food product containing omega-6 and **omega-3 fatty acids**.

IN Reinhart G.A.

PA Iams Co.

SO European Patent Application

PI EP 678247 A1

DS BE; DE; FR; GB

AI 19950418

PRAI United States 19940418

DT Patent

LA English

SL English

AB A **pet-food** that reduces inflammatory and allergic skin responses is described. **Pet** animals fed on a diet consisting essentially of the proposed **pet-food** have an improved skin appearance. The proposed **pet-food** contains omega-6 and **omega-3 fatty acids**. The preferred **omega-3** source is fish oil and flax. The proposed **pet-food** is suitable for a wide range of **pets**, but it is used preferably to treat **dogs**.

CT APPEARANCE; EUROPEAN PATENT; IMPROVEMENT; PET FOODS;  
PROPERTIES; SKIN

DED 15 Jan 1996

L103 ANSWER 26 OF 26 FROSTI COPYRIGHT 2004 LFRA on STN

AN 321785 FROSTI

TI A food product for pets.  
 IN Oleson K.  
 SO British Patent Application  
 PI GB 2262427 A  
 AI 19921019  
 PRAI Denmark 19911106  
 DT Patent  
 LA English  
 SL English  
 AB A **petfood** product, which is mainly made of flesh from fish of the species Salmonides, is described, as is the method of its manufacture into **dog** biscuits. The **dog** biscuit is claimed to have an attractive smell and taste to **dogs**, and since it contains **omega-3 fatty acids** is beneficial to **dogs'** health.  
 CT BISCUITS; DOG FOODS; DOGS; FATTY ACIDS; FISH; HEALTH; OMEGA 3; OMEGA 3 FATTY ACIDS; PATENTS; PET FOODS; PRODUCTION; PROPERTIES; SENSORY; SENSORY PROPERTIES  
 DED 23 Jul 1993

=> => d all l101

L101 ANSWER 1 OF 1 FROSTI COPYRIGHT 2004 LFRA on STN  
 AN 633117 FROSTI.  
 TI Synergistic effect of diet and human interaction on the **behavior** of **dogs**.  
 IN Davenport G.M.; Hennessy M.B.  
 PA IAMS Co.  
 SO PCT Patent Application  
 PI WO 2004006688 A1  
 AI 20030709  
 PRAI United States 20020712  
 DT Patent  
 LA English  
 SL English  
 AB A novel method for moderating the **behaviour** of a **dog** living in an animal shelter utilizes the synergistic effect of feeding a high quality diet and periodic interaction with a human. The invention is claimed to reduce levels of stress hormones such as adrenocorticotropic hormone, hypothalamic-pituitary-adrenal, and cortisol in an animal living in a shelter. The diet is typically administered on an infrequent or as-needed basis or preferably in a more routine manner, e.g., once, twice or three times daily. The method claims to improve a **dog**'s adaptation to the shelter using a diet consisting of high amounts of docosahexaenoic acid and eicosapentaenoic acid. It also claims to enhance successful adoption rates and the well-being of the animal.  
 CT ANIMAL DIET; ANIMAL HEALTH; ANIMAL WELFARE; DIETETIC FOODS; DOCOSAHEXAENOIC ACID; DOG FOODS; EICOSAPENTAENOIC ACID; FATTY ACIDS; LIPIDS; OMEGA 3 FATTY ACIDS; PATENT; PCT PATENT; PET FOOD ADDITIVES; PET FOOD SUPPLEMENTS; PET FOODS; POLYUNSATURATED FATTY ACIDS  
 DED 18 Mar 2004

=> d his

FILE 'HCAPLUS' ENTERED AT 16:17:58 ON 15 DEC 2004

L1 1 S US20040068010/PN OR US2002-065326#/AP, PRN  
     E OMEGA/CT  
     E E7+ALL

L2 5231 S E2  
     E FATTY ACIDS/CT

L3 5909 S E3 (L) (OMEGA3 OR OMEGA 3 OR N 3)  
     E FATTY ACIDS (L) POLYUNSAT/CT

L4 5688 S E12, E14, E15

L5 5909 S L2-L4  
     E BEHAVIOR/CT

L6 55 S E3-E128 AND L5  
     E E3+ALL

L7 132 S E2+NT AND L5  
     E BEHAVIOR/CT  
     E E4+ALL

L8 55 S E2 AND L5

L9 132 S L6-L8  
     E DOG/CT  
     E E3+ALL

L10 9780 S E1 OR E2+NT OR E3+NT  
     E E2+ALL

L11 12073 S E8-E10, E7+NT  
     E CAT/CT

L12 2069 S E3-E7  
     E E3+ALL

L13 4293 S E1 OR E2+NT OR E3+NT  
     E E2+ALL

L14 5533 S E8-E10, E7+NT  
     E E6+ALL

L15 5616 S E6+NT  
     E CAT/CT  
     E E3+ALL  
     E E3+ALL

L16 270 S E6  
     E DOG/CT  
     E E3+ALL  
     E E3+ALL

L17 572 S E6  
     E PET/CT  
     E E10+ALL

L18 546 S E5, E4

L19 2 S L9 AND L10-L18

L20 2 S L9 AND (PETFOOD? OR (DOG OR CAT OR PET) (L) (FOOD? OR FEED? OR

L21 3 S L19, L20

L22 2 S L21 NOT COSMETIC/TI  
     E ZICKER S/AU

L23 20 S E3-E7  
     E DODD C/AU

L24 30 S E3, E8, E9, E23  
     E JEWELL D/AU

L25 150 S E3-E11, E9-E23  
     E FRITSCH D/AU

L26 33 S E3-E5

L27 27 S L5 AND HILL?/PA, CS

L28 3 S L5 AND (COLGATE? OR PALMOLIV?)/PA, CS

L29 5 S L5 AND L23-L26

L30 35 S L27-L29

L31 1 S L30 AND L9

L32 2 S L22, L31

L33 34 S L30 NOT L32

L34 10 S L33 AND (DOG? OR CAT? OR PET? OR CANI? OR FELI?)

L35 6 S L33 AND (DOG? OR CAT? OR PET? OR CANI? OR FELI?)/CT

L36 10 S L34,L35  
 L37 7 S L36 NOT (CATTLE OR RAT)  
 L38 24 S L33 NOT L36  
 L39 9 S L32,L37 AND L1-L38  
 L40 130 S L9 NOT L19,L39  
 L41 61 S L40 AND BEHAV?  
 L42 45 S L41 AND (ANIMAL(L)NUTRI?)/SC, SX  
 L43 16 S L42 NOT (MICE OR MOUSE OR RAT)  
 L44 12 S L43 NOT CHILD  
 L45 2 S L44 AND MONKEY  
 L46 10 S L44 NOT L45  
 SEL DN AN 5 6 7 10  
 L47 4 S L46 AND E1-E12  
 L48 15 S L39,L45,L47

FILE 'HCAPLUS' ENTERED AT 16:38:03 ON 15 DEC 2004

FILE 'MEDLINE' ENTERED AT 16:39:40 ON 15 DEC 2004

E OMEGA/CT  
 E E7+ALL  
 L49 3005 S E2  
 E E2+ALL  
 L50 6821 S E17+NT  
 L51 6821 S L49,L50  
 E DOG/CT  
 E E6+ALL  
 L52 28998 S E3+NT  
 E DOGS/CT  
 E E3+ALL  
 L53 227893 S E7+NT  
 E CAT/CT  
 L54 11839 S E13+NT  
 E CATS/CT  
 L55 103179 S E3+NT  
 E PET/CT  
 E E3+ALL  
 E E2+ALL  
 L56 8897 S E4+NT  
 L57 103 S L51 AND L52-L56  
 L58 0 S L57 AND (F3. OR F4.)/CT  
 L59 2 S L57 AND (F1. OR F2.)/CT  
 L60 1 S L59 AND BEHAV?

FILE 'MEDLINE' ENTERED AT 16:43:26 ON 15 DEC 2004

FILE 'BIOSIS' ENTERED AT 16:43:58 ON 15 DEC 2004

L61 9846 S FATTY ACID (L) (OMEGA3 OR N 3 OR OMEGA 3)  
 E DOG/BC  
 E CANI/BC  
 L62 109 S E4+NT AND L61  
 E FELI/BC  
 L63 28 S E4+NT AND L61  
 L64 124 S L62,L63  
 L65 3 S L64 AND BEHAV?  
 L66 1 S L65 NOT (HYPOXIC OR SLAUGHTERHOUSE)/TI  
 L67 2 S 07003/CC AND L64  
 L68 1 S L66 AND L67

FILE 'BIOSIS' ENTERED AT 16:47:40 ON 15 DEC 2004

FILE 'WPIX' ENTERED AT 16:47:51 ON 15 DEC 2004

L69 1216 S L61/BIX  
 L70 1173 S ((FATTY ACID) (L) POLYUNSAT?)/BIX

L71 2140 S L69,L70  
 L72 202 S L71 AND D03-G?/MC  
 L73 189 S L71 AND A23K001/IPC  
 L74 251 S L72,L73  
 L75 2 S L74 AND BEHAV?/BIX  
 L76 60 S Q214/M0,M1,M2,M3,M4,M5,M6 AND L71  
 L77 2 S L76 AND BEHAV?/BIX  
 L78 2 S L75,L77  
 L79 259 S L74,L76 NOT L78  
 L80 77 S L79 AND (DOG? OR CAT? OR PET?)/BIX  
 L81 7 S L79 AND (CANIS? OR CANIN? OR FELIS? OR FELIN?)/BIX  
 L82 79 S L80,L81  
 L83 12 S L82 AND (PET OF DOG OR CAT OR PUPPIES OR CANINE OR ANIMAL NUT  
 L84 14 S L78,L83  
 L85 180 S L79 NOT L82  
 L86 97 S L85 AND ANIMAL?/BIX  
 L87 83 S L85 NOT L86

FILE 'WPIX' ENTERED AT 17:06:02 ON 15 DEC 2004

FILE 'FROSTI' ENTERED AT 17:06:22 ON 15 DEC 2004

L88 3991 S L61  
 L89 6434 S FATTY ACID (L) (POLYUNSAT? OR POLY UNSAT?)  
 L90 7684 S L88,L89  
 E POLYUNSATURATED FATTY ACID/CT  
 L91 3614 S E7+NT  
 E OMEGA/CT  
 L92 2362 S E16+NT  
 L93 7684 S L90-L92  
 E PET FOOD/CT  
 L94 42 S L93 AND (PETFOOD? OR PET FOOD?)  
 L95 20 S L93 AND (DOGFOOD? OR DOG FOOD? OR CATFOOD? OR CAT FOOD?)  
 L96 72 S L93 AND (DOG OR CAT OR PET OR CANIN? OR CANIS? OR FELIN? OR F  
 L97 72 S L94-L96  
 E PET FOODS/CT  
 E E3+ALL  
 L98 35 S E1+NT AND L93  
 L99 72 S L97,L98  
 L100 2 S L99 AND BEHAV?  
 L101 1 S L100 AND ANIMAL WELFARE/CT  
 L102 70 S L99 NOT L100  
 SEL AN 1 3 5 6 7 10 15-18 22 24 26 30-32 34 36 39 40 42 43 51 5  
 L103 26 S L102 AND E1-E26

FILE 'FROSTI' ENTERED AT 17:14:28 ON 15 DEC 2004

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